DOCUMENT RESUME

ED 378 643 EA 026 402

AUTHOR	English, Fenwick W.; Hill, John C.
TITLE	Total Quality Education: Transforming Schools into Learning Places.
REPORT NO	ISBN-0-8039-6106-5
PUB DATE	94
NOTE	133p.; Volume 2 of the series "Total Quality Education for the World's Best Schools: The Comprehensive Planning and Implementation Guide for School Administrators," edited by Larry E. Frase.
AVAILABLE FROM	Corwin Press, Inc., 2455 Teller Road, Thousand Oaks, CA 91320-2218.
PUB TYPE	Books (010) -- Guides - Non-Classroom Use (055)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Curriculum Design; Educational Assessment; *Educational Change; Educational Planning; *Educational Quality; Elementary Secondary Education; Models; *Organizational Development; Organizational Theories; Total Quality Management
IDENTIFIERS	*Total Quality Education

ABSTRACT

To design a school where all children succeed means creating a place that puts learning, rather than competition, at the heart of the process. This book does not propose Total Quality Management (TQM) as the cure for improving performance of U.S. schools, but rather argues that schools as a place and name should be replaced with the term "learning places." The book gives clear-cut illustrations of how the new learning place should look from the perspectives of curriculum, classroom environments, teaching, and architecture. In addition, the term "Total Quality Education" (TQE) should replace TQM. Chapter 1 discusses the nature of TQE and chapter 2 describes the shift from school to learning place in terms of philosophy, psychology, pedagogy, psychometrics, and curriculum. The third chapter presents the learning model for the learning place, which addresses the domains of self-readiness, competence, and inquiry. Curriculum models that are based on arena and nonlinear planning are described in the fourth chapter. Chapter 5 presents an evaluation approach that rejects the false science approach of education, which asserts that it is possible to relate learning outcomes to inputs and processes. Each chapter concludes with a list of key terms and concepts. Four tables are included. (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 378 643

Total Quality Education

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY
G. Alkema
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EA 026 402

Volume 2

BEST COPY AVAILABLE

LA

Total Quality Education

Total Quality Education for the World's Best Schools

The Comprehensive Planning and Implementation Guide for School Administrators

Series Editor: **Larry E. Frase**

1 **The Quality Education Challenge**
Carolyn J. Downey, Larry E. Frase, Jeffrey J. Peters

2 **Total Quality Education**
Transforming Schools Into Learning Places
Fenwick W. English, John C. Hill

3 **Creating Learning Places for Teachers, Too**
Larry E. Frase, Sharon C. Conley

4 **The TQE Principal**
A Transformed Leader
Richard Sagor, Bruce G. Barnett

5 **Building Coalitions**
How to Link TQE Schools With Government, Business, and Community
Betty E. Steffy, Jane Clark Lindle

6 **Teacher Unions and TQE**
Building Quality Labor Relations
William A. Streshly, Todd A. DeMitchell

7 **Multiculturalism and TQE**
Addressing Cultural Diversity in Schools
Paula A. Cordeiro, Timothy G. Reagan, Linda P. Martinez

8 **Making Governance Work**
TQE for School Boards
William K. Poston Jr.

9 **TQE, Technology, and Teaching**
Eugene R. Hertzke, Warren E. Olson

10 **Tools for Achieving TQE**
Raymond F. Latta, Carolyn J. Downey

11 **Structuring Schools for Success**
A View From the Inside
Mary Scheetz, Tracy Benson

12 **Planning and Troubleshooting Guide**

The authors dedicate this series to the memory of W. Edwards Deming, 1900-1993

Total Quality Education

Transforming Schools Into Learning Places

Fenwick W. English
John C. Hill

CORWIN PRESS, INC.
A Sage Publications Company
Thousand Oaks, California

Copyright © 1994 by Corwin Press, Inc.

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

For information address:

Corwin Press, Inc.
A Sage Publications Company
2455 Teller Road
Thousand Oaks, California 91320

SAGE Publications Ltd.
6 Bonhill Street
London EC2A 4PU
United Kingdom

SAGE Publications India Pvt. Ltd.
M-32 Market
Greater Kailash I
New Delhi 110 048 India

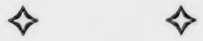
Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

English, Fenwick W.
Total quality education : transforming schools into learning places/Fenwick W. English, John C. Hill.
p. cm.—(Total quality education for the world's best schools; v. 2)
Includes bibliographical references.
ISBN 0-8039-6106-5 (pbk: alk. paper)
1. School management and organization—United States. 2. Educational change—United States. 3. Education—United States—Aims and objectives. I. Hill, John C. II. Title. III. Series.
LB2805.E667 1994
371.2'00973—dc20 93-40953

94 95 96 97 98 10 9 8 7 6 5 4 3 2 1

Corwin Production Editor: Judith L. Hunter



Contents

Foreword ix
Larry E. Frase

Preface xiii

About the Authors xvii

1. **The Nature of Total Quality Education** 1
Striking Parallels Between Deming and Dewey 1
TQE Represents True Reform 4
Deming's Dim View of Pay Incentives 6
Deming's Criticism of U.S. Educational Goals 7
Using Deming to Consider Deep Change 8
Deming and Curricular Issues 12
The Deming Learning Place Versus a School 13
Key Terms and Concepts 15
References 17

2. **The Learning Place** 20
Deming's Challenge to Traditional Schooling 21
A Glimpse of a Learning Place 22
Middle-Range Experiences 23
Higher-Range Experiences 24
The Learning Council 25
Home-Community-Business Linkages 25
Replacing Supervision With Consultation 25

Reflective Learning 26
Temporal/Spatial Forms 27
Educational Transformation 30
Promoting Reflection in Action 30
Key Terms and Concepts 33
References 34

3. The Learning Model for the Learning Place 36
Biological Origins of the Personal Curriculum 37
Variance of Individuals 38
The Self Domain 39
The Readiness Domain 41
The Competence Domain 42
The Inquiry Domain 43
Four Teaching Themes 45
Linking Situational Teachers to the Domains 51
Anticipating Results 52
Some Reasonable Expectations 52
Key Terms and Concepts 57
References 58

4. Curriculum Planning 60
Rejecting Static Curriculum Models 60
Rejecting Scientism and False Objectivity 62
Planning Systems: Ethico-Political Expressions 62
Reexamining Learning and Teaching 64
Arena Planning and Nonlinear Models 65
Curriculum Chunking 71
Rejecting Means-Ends Dichotomies in Schools 74
Steps for Developing Elementary Curriculum 76
Eliminating Secondary Departmentalization 79
Refusing to Engage in Tinkering 80
Opposition and Opponents 81
Learning-Centered Education 83

Moving Toward a TQE Curriculum 85
Always "Becoming" 85
Key Terms and Concepts 89
References 91

5. Evaluation 94
Learning Versus Measurement 95
Keeping the Joy in Learning 96
Putting Learning First 97
Defining Success 98
Putting Evaluation in Its Place 98
Toward a New Rationale for Evaluation 99
Kaizen/Continuous Improvement 102
Evaluation as Empowerment 103
Key Terms and Concepts 105
References 106

Planning and Troubleshooting Guide 108

Foreword

Education has been besieged by panaceas, magic elixirs, and sundry other pedagogical potions masquerading as legitimate innovations since the beginning of the 20th century. All have faded, leaving little or no substantive improvement in their wake. Too often, they have left failure and public hostility; for example, witness the fall of Deweyism in the late 1920s and the subsequent public backlash. Witness the fall of unbridled "do what you want, when you want to do it," open education of the 1960s and 1970s and the immediate vociferous denunciation by government and the public. There were kernels of wisdom in Deweyism and open education, but they were largely ignored or misconstructed by pedagogues influenced by pop psychology.

There is a strange similarity between the rise and fall of American education and American industry. Both were the victims of their successes. It has taken American industry 30 years to realize the reasons for its demise and, conversely, for Japan's success. Japan's success is attributed largely to the work of W. Edwards Deming, an American. Now many American corporations—Cadillac, Saturn, Xerox, and Harley-Davidson, to name a few—have adopted and adapted Deming's Total Quality Management (TQM) concepts. They now manufacture high-quality products, and their market shares and profits have returned.

American education also can regain its might. This book does not propose TQM as the cure. Instead the authors offer a compelling argument that "schools" as a place and a name should be

junked. English and Hill have combined the most pedagogically sound ideas offered by Deming and great educators such as Dewey to create "learning places."

This book will become a vital tool for redesigning education in the United States. Superintendents, board members, principals, and teachers will find its contents provocative because they will be the architects of school reform. English and Hill deal very adroitly with American education's long-held obsession with competition, standardization, and forced failure. The authors do not limit their discussion to theory and abstraction; they give solid, clear-cut illustrations of how the new learning place should look from the perspectives of curriculum, classroom environments, teaching, and architecture.

Further, this book answers the well-stated criticisms advanced by Alfie Kohn in the September, 1993, issue of *Educational Leadership*. Kohn argues that "learning, per se, or even more remarkably, curriculum" is not mentioned in the reams of literature suggesting the use of TQM in education. His argument is now past tense; *this book is about learning and curriculum.*

English and Hill are prolific writers, teachers, and consultants. Their more than 100 professional articles and 15 books on curriculum, teaching, and educational administration have provided vision for many years. Their more recent books include *The New American School* (Hill, 1992), *Deciding What to Teach and Test* (English, 1992a), and *Educational Administration: The Human Science* (English, 1992b). These books are being used internationally in school districts and universities. They are testimony to English's and Hill's history as educational paradigm pioneers. They have questioned the status quo and have delivered insightful, successful alternatives. Possibly English's (1987) book *The Curriculum Audit* provides the best example of this.

English and Hill have combined their wisdom and knowledge to produce this book on "the learning place." You will find this book provocative and visionary. It provides the vision for breaking the shackles that have restricted education. It shows the way to create Total Quality Education.

Larry E. Frase
San Diego State University

References

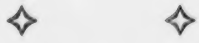
English, F. (1987). *The curriculum audit.* Lancaster, PA: Technomic Publications.

English, F. (1992a). *Deciding what to teach and test.* Newbury Park, CA: Corwin.

English, F. (1992b). *Educational administration: The human science.* New York: HarperCollins.

Hill, J. (1992). *The new American school.* Lancaster, PA: Technomic Publications.

Kohn, A. (1993, September). Turning learning into business: Concerns about total quality. *Educational Leadership, 51*(1), 58-61.



Preface

Anyone considering how to change schools to eliminate some of the worst things about them, along the lines of what W. Edwards Deming recommends, is at once struck with how deep his admonitions cut to the heart of school life. At first we thought we could explain simply how to restructure schools to engage the Deming education agenda. But Deming's ideas go beyond restructuring. They embrace a complete transformation of the school because competition is the watchword of nearly all facets of school life and the socioeconomic system that supports it.

So, in the process of writing this book, our preliminary ideas were recast. There is no way to re-create a school to ensure that every student wins and that there are no losers except to junk our current model of school, its curriculum, physical structure, dominant teaching methods, and tests and psychometrics based-on required student failure and begin again.

To do justice to the process, we finally got to the point where we abandoned using the word *school* at all. *School* carries too much baggage. The concept cannot be redeemed. It is intellectually bankrupt. We thus shifted to the idea of the *learning place*. That enabled us to clear our minds, recenter learning at the heart of a fresh approach, and get on with extending Deming's ideas into practice. We found a radical transformation occurring as we wrote. At times we were aware that some of the ideas had been tried before. Some could be traced to the ancient world. But we do not believe that any school in the United States today embraces all of

the features we describe. We acknowledge that some of the ideas contained in this book were described earlier by English (1989) and by Hill (1992, esp. pp. 27-65). However, both works have been expanded and extended in this book.

We are deeply cognizant that our socioeconomic structure is anything but egalitarian and that, as a result, thousands of children come to school every day entering academic competition on an unlevel playing field. These differences transcend those that are inherited. Although we do not believe that schools can be blamed for everything, we do not spend any time theorizing about necessary social or political changes to democratize our society and then to transform schools. We are, in the end, educators—not sociologists, economists, or political scientists. Our task is to redefine the school to conform to Deming's statements about education.

Between us, we represent four decades of practitioner experience. We are not detached intellectuals dreaming an impossible dream. We have worked in schools in many states. We believe that the educational changes that embody W. Edwards Deming's ideas are possible. They can be implemented. We have tried to sketch out as many details as we thought we had time and space in order to move from the idea to reality.

In the end we abandoned TQM (Total Quality Management) as too superficial for deep educational change. We prefer TQE (Total Quality Education). The management changes are the easiest to make. The educational changes are of a far different magnitude. But they are the ones that ultimately will make the most difference for children.

One of us spent four days in Dallas, Texas, in 1993, attending a Deming seminar with more than 400 people in the audience and about as many more on 40 downlink satellite centers around the country. Deming is not only a legend at 93 but also has a wry sense of humor as he lectures 4-5 hours each day. At times he would cock his head and look at his audience and ask, "Are we learning?" or "Are we having fun?" We think those two comments are also the benchmarks of the condemnation of traditional schooling in the United States. Too few students are learning, and no one is having much fun anymore.

Where we use the phrase "the Deming learning place" should not be construed to mean Deming has endorsed it. Deming was not consulted in the construction of this book and is therefore in no way responsible for what appears in it. We do believe, however, that what we proscribe here are logical deductions and extrapolations of his most recent written statements regarding schools and education, notably those that appear in his 1993 book *The New Economics.*

Finally we have to add that we are not enamored with national educational goals, tests, or any more "competency" this or "outcome based" that. All of these notions are the clutter of the mindset of the late and swiftly passing 20th century, with its penchant for inspection as the antidote for quality problems. National testing and goal setting are not only expensive but also tragic. No amount of goal setting and testing will ever improve the quality of American education. Those are fringe activities at best.

We suggest digging deeply into schools and turning them inside out. No more classrooms. Just learning centers and teachers who know how to guide the process. We invite the reader to find out how by getting into the book. You will find nothing so esoteric that you cannot transform your own school into a learning place. The challenge is not so much knowing how to do it, but actually doing it! We believe the effort will be worth it. But we would not want to fool anybody. There will be plenty of resistance to Deming's concepts about competition being replaced by cooperation. It took American business nearly five decades to come to appreciate them. It will take American education at least as long. Although the saying is not profound, one starts by starting. So let's begin. The children are worth it.

Fenwick W. English
University of Kentucky

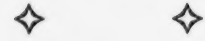
John C. Hill
University of Cincinnati

References

Deming, E. W. (1993). *The new economics.* Cambridge, MA: MIT Press.

English, F. (1989). A school for 2088. In H. J. Walberg & J. J. Lane (Eds.), *Organizing for learning: Toward the 21st century* (pp. 89-97). Reston, VA: NASSP.

Hill, J. (1992). *The new American school.* Lancaster, PA: Technomic.



About the Authors

Fenwick W. English is a Professor of Educational Administration in the Department of Educational Administration and Supervision in the College of Education, University of Kentucky. He has served as a classroom teacher, middle school principal, assistant superintendent, and superintendent of schools in two New York school districts. He is the author and co-author of 12 books, including the Corwin Press best-seller, *Deciding What to Teach and Test* (1992). He has worked or consulted in 48 states, Puerto Rico, the U.S. Virgin Islands, and seven foreign countries including Saudi Arabia and Japan. He has evaluated reform efforts nationally through his work in curriculum audits and as an adviser to the Chicago Finance Authority. He earned his B.S. and M.S. at the University of Southern California and his Ph.D. at Arizona State University.

John C. Hill is a Professor of Educational Administration in the Department of Educational Administration, College of Education, University of Cincinnati. He has served as a classroom teacher and a middle level principal. He is the author of two books on program evaluation and the widely read publication *The New American School* (1992), released by Technomic of Lancaster, Pennsylvania. He received his B.S. from Mt. Union College of Ohio and his M.A. and Ph.D. from The Ohio State University. He also has taught at the University of Maryland, Trinity College, and the University of Dublin in Ireland.

✧ 1 ✧

The Nature of Total Quality Education

W. Edwards Deming is not renowned for being an educator or for pioneering in school reform. Nonetheless his ideas regarding schooling and education, which came very late in his near-century life span, pose enormous implications for all levels of formal education.

It is not our purpose in this small book to engage Deming's theoretical framework or to probe deeply his philosophical underpinnings. One also must separate Deming's advice for management or his management theory from his views regarding education and schooling, as they are not necessarily synonymous. In fact, TQM (Total Quality Management) we replace with TQE (Total Quality Education). This book is about Deming's views of education and schooling and their logical extrapolations as a guide for practice.

Striking Parallels Between Deming and Dewey

One encounters the clearest idea of Deming's thoughts about education in his 1993 book *The New Economics*. In that volume Deming is exceptionally critical, even condemnatory, of a slate of common school practices. Among them are:

- Grading (as in letter grades), because it discourages learning

- Forced rankings of students and teachers by artificial means (bell-shaped curves)
- Gold stars for student performance or for work completed
- Rankings between schools or among teachers on merit or other criteria
- Any practice or procedure in which schools produce winners and losers (Deming, 1993, pp. 148-157); although Deming does not directly mention the practice of tracking, there is no more invidious way to create permanent winners and losers than so-called ability grouping (Oakes, 1992)

One can gather from Deming's condemnation of these very common and accepted schooling practices, and from some additional commentary he has made, what his approach and view about education is about.

Deming Is Opposed to All Forms of Competition With the Exception of Games in Schools

"We must throw overboard the idea that competition is a necessary way of life. In place of competition, we need cooperation" (Deming, 1993, p. 124). Competition is an evil in organizations because it creates winners and losers, and nobody wants losers in his or her organization.

Competition is evil because it conditions humans to failure, while Deming envisions a "win-win" approach. The primary villain in opposing win-win approaches is *suboptimization*, the phenomenon wherein one part of an organization is successful at the expense of the entire organization. Internal competition inevitably leads to suboptimization and cripples or kills the organization.

Deming sees the schools as creating forms of competition in human development that later contribute to the acceptance of practices that are destructive to humans and to the organizations in which they work.

Deming is not the first to want to use schools to create cooperative forms of social organization. John Dewey (1964) declared in his pedagogic creed that, "In sum, I believe that the individual

who is to be educated is a social individual, and that society is an organic union of individuals" (p. 429). Where Deming stresses cooperation, Dewey stressed the same idea with the concept of *community* (p. 431). Deming (1993) stresses that managers must help their people "to see themselves as components in a system" (p. 128); Dewey asserted that "the child should be stimulated and controlled in his work through the life of the community" (p. 431).

James Comer (1980), a modern school reformer, has criticized competition in schools as destructive of the larger social fabric by creating whole classes of people alienated from schools and society as a result of the people's forced school status of "losers." Crime, drug use, apathy, anger, and violence are some of the symptoms of creating artificial winners and losers. "In many cases these responses are defensive reactions or rejections of the mainstream social system in response to a sense of being rejected or not being able to function well in the mainstream system" (Comer, 1980, p. 14).

Deming Is Opposed to Grading Because It Destroys an Innate Joy of Learning for Its Own Sake

Deming views the learning process almost in romantic, Roussian terms. In an uncanny way, he mirrors John Dewey's view of children (Dewey & Dewey, 1962, p. 18) as he sees the child as "pure" and "natural." Noting that everyone is born with "the yearning for learning," Deming envisions grading in school as destructive of this innate joy. In fact, in his book, a chart entitled "Forces of Destruction" (1993, p. 125) begins by labeling "forced distribution of grades in school, Gold stars," as the first such debilitating practice in human life.

Deming's denunciation of A, B, C, D, F grading in schools has long echoes in the canyons of school reform. For example, William Glasser (1969) similarly denounced grading practices in schools when he noted, "Probably the school practice that most produces failure in students is grading" (p. 59). Glasser (1969) criticized grades as becoming "the be-all and end-all of education" because they had acquired the status of "moral equivalents" (p. 60). When students became more interested in acquiring "good grades" than in being educated, they tended to enroll in superficial, elective

courses that were not very challenging. One result was grade inflation (Sedlak, Wheeler, Pullin, & Cuscik, 1986, p. 43). Deming is on firm grounds in his objections to grading in schools. The most radical education reform in the nation occurred in Kentucky, where letter grading is in the process of being eliminated in grades K-3 to reduce school failure (Steffy, 1993).

Deming Is Opposed to Testing That Creates Winners and Losers Based on the Principle of Artificial Scarcity

Being firmly grounded in statistics and probability theory, Deming sees testing as creating artificial "winners and losers" in industry and in schools. "Grading and ranking produce artificial scarcity of top grades," notes Deming (1993, p. 151). Declaring this practice to be wrong, Deming says, "There is no scarcity of good pupils. There is no scarcity of good people. There is no reason why everyone in a class should not be in the top grade" (1993, p. 151). Similarly Dewey (1964) advised, "Examinations are of use only so far as they test the child's fitness for social life and reveal the place in which he can be of the most service and where he can receive the most help" (p. 432).

Deming (1993) views the matter in the same terms. Those students (or workers) who might fall outside the probability ranges should be "helped" (p. 130).

TQE Represents True Reform

Whereas Deming's managerial theory may not be radical in that it would not change hierarchical relationships within or without organizations (English, 1994), his educational views are most certainly reform oriented. The proposed elimination of destructive competition in public schooling stands as a challenge to many decades of practice. Competition has been embraced as "healthy" and as motivational to enhance student performance (Wilson & Wilson, 1921, p. 220). Spelling bees, math baseball, and the like are pervasive influences in schools. Such artificial contests produce

humiliation and demoralization among students (Deming, 1993, p. 151). These contests produce or reproduce a society that is decidedly unequal in its distribution of wealth and power. For example, approximately 1.6% of the U.S. population own 80% of all stock, 100% of all state and municipal bonds, and 88.5% of corporate bonds (Parenti, 1974, p. 14).

To examine the radicalness of Deming's anticompetition stance, one must begin with the role that the school plays in the reproduction of the society in which it is located. This is territory Deming himself did not explore, except as it related to the negative influence of competition within a business.

Many scholars in education have presented a case that a society unequal in distribution of wealth and power places requirements on its schools to reproduce itself with the same inequalities intact. This is the idea of *correspondence theory* (Bowles & Gintis, 1976, p. 11).

To perform the unpleasant task of sorting students into the "winners" and "losers" that Deming deplores, the schools have resorted to a host of so-called "objective" tools to perform the task. One is to artificially skew grades on the curve (assumed normalcy of student response in psychological testing) so that not everybody can "win." Grading on the curve automatically produces "losers" (English, 1992). The losers, students who perform poorly, come to believe that the causes of their failure are their own rather than those of the system in which they have been compelled to participate. This idea is violative of Deming's notion of mistaking common causes and special causes in applying probability theory in organizational problem solving.

The *common cause* of student failure (poor grades) is that the system requires it. But failure is treated by the system as a *special cause* and purports it to be due to lack of initiative or intelligence on the part of the students. In this situation, system errors are continued because the system "excuses" its mistakes (Tyack, 1974, p. 198).

Nothing about this so-called "mistake" should be surprising, say the critics of public education. Many students are supposed to fail in schools. They cannot all be winners because there would be no place in the current society for everyone to be a winner. So schools "legitimate" student failure to maintain the existing system of socioeconomic privilege (Kerbo, 1983, p. 389).

Many of these ideas take even experienced educators by surprise. The reason is that many educators have assumed that educational practices were "neutral" and, therefore, that failure on the part of the students can essentially be blamed on them, their families, or their perceived social/educational "deficits." One common antidote is compensatory education. Because many students' backgrounds are perceived as being antithetical to doing well in school, these students must be given extra "doses" of schooling to compensate or medicate (to use the compensatory metaphor). This practice validates the fact that many children are perceived by their teachers, administrators, and the system as "losers" (persons with deficits) before they ever get to schools in the first place. Dominant school practices simply reinforce the schools and the same children to believe a system prophecy. In Deming's words, this is a system problem and therefore it must take a system solution to reduce or eliminate it.

This, then, is Deming's reform agenda. He would not accept any practice that creates winners or losers, that is competitive, and that destroys cooperation among students or among teachers. He is opposed to all systems of ranking. And by extension he is opposed to standardized testing (because it uses artificial definitions of hierarchical positioning to create phony scarcities).

Deming's Dim View of Pay Incentives

Deming's (1993, p. 101) comments on teachers are scarce. He asserts that they must know something about variation (probability theory). Deming has the most to say about compensating teachers indirectly or rewarding them for good performance. Deming's (1986) antagonism toward manipulating pay schemes is well known. Although he is not opposed to differentials in pay, he is opposed to all forms of merit pay, management by objectives (MBO), performance pay, management by results, and incentive pay (1993, pp. 25-31).

Deming's antipathy toward these ideas is based on his assertion that they do not address the causes of variation, they are divisive, they instill internal competition that leads to suboptimization,

and they instill fear. Such pay schemes lead away from cooperation and community. In this stance Deming's antimerit pay/performance pay are reinforced solidly by much research about the failure of these approaches to improve substantially student achievement (Timar, 1992, pp. 27-57).

Deming's Criticism of U.S. Educational Goals

Another area in which Deming has been exceptionally critical is goals that lack identifiable means to accomplish them. He singles out the national educational goals as "horrible examples" in which in ex-President George Bush's *America 2000* "high school graduation rates will be at least 90 percent, every adult will be literate and every school will be free of drugs" (p. 46). "By what means?" asks Deming.

Statements that lack the methods are worthless. Notes Deming (1993), "What counts is the method." He quotes Lloyd Nelson: "If you can accomplish a goal without a method, then why were you not doing it last year?" (p. 42).

Goals that lie outside the upper limits of the existing process cannot be achieved by that process, says Deming (1993, p. 43). The only way such numerical goals might even be ascertained is by redefining the terms used, distorting or faking results, or running up excessive costs (p. 44).

From a knowledge of probability theory, Deming then asserts that systems cannot fix themselves; they require outside intervention. The reason systems cannot change themselves is they do not understand the sources of variation embedded in their processes. Leaders and workers are too tied into the status quo. External intervention is the only antidote.

All of these comments cast serious doubts about fundamental reform occurring from within school systems without external intervention. Deming insists that transforming organizations cannot occur without knowledge and without theory. Unless change is related to a theoretical framework, one does not know what to change if things do not work (1993, p. 94).

Using Deming to Consider Deep Change

Deming (1993) begins his views of transforming organizations by employing the Greek word *metanoia*. This word means "reorientation, penitence, or repentance." This posture amounts to relinquishing commonsense views of the salutary benefits of competition, abandoning the use of goals without understanding the means to attain them, junking systems of grading and tracking that create artificial winners and losers within schools, and teaching cooperative forms of learning. Above all, Deming would strive to foster an atmosphere of joy in learning, one that did not subside as students pursued their education. Deming sounds very Deweyian in this regard.

Let us see what we would encounter in a typical American educational system (see English & Steffy, 1992). Such a system contains nearly all of the characteristics that Deming finds deficient in attaining quality. They are listed as the next four subheadings.

Nebulous, Unattainable, or Numerical Goals Dominate Policy Discussions, Planning, and Reform Rhetoric

Typical system goals in U.S. educational districts are either vague—the kind of statements called "we believes," which have no translation and therefore are devoid of *means*—or numerical and similarly devoid of means.

Some models of strategic plans allow vague statements to serve as "visions," without linkage to specific organizational means. Board policies are also not very helpful in most senses because the essence of a policy is to state the "what" instead of the "how to." This essence leaves them devoid of the means Deming insists must be present in order to be useful to organizations.

Widespread Use of Competition With Subsequent Student Failure: The System Creates Losers

Competition is widespread in U.S. school systems. Competition for grades begins at an early age. Student failures can be

spotted early on. By the third grade, the joy of learning has ceased to be functional for large numbers of children. The use of competition is relentless. Remedial tracks for students are begun at an early point in schooling. These tracks are for "slow" students unable to keep up the pace. Learning is defined narrowly and is not open to all styles or interests. Remedial programs and tracking are forms of "rework" carrying industrial-factory metaphors. Rework, doing the work over, is common throughout U.S. school systems. In an industrial design of work, the concept of pulling students "off the line [assembly line]" is called *line balancing* (English, 1987, p. 95). It exists as a practice in pullouts for remediation, which is a form of line balancing and tracking—that is, putting more difficult pieces of work on a slower assembly line.

Webb (1981, p. 297) indicated that middle-class children have so interiorized competitive approaches to school work that they continue them even when it becomes self-defeating. The notion that competition increases student performance is true only if the tasks to be learned are unimaginative, rote, simple, and repetitive in nature (Webb, 1981, p. 299).

Newer forms of assessment, as for example in Kentucky, are emphasizing group problem-solving work in taking the newly designed state authentic assessment batteries (Steffy, 1993, p. 52).

The Use of Artificial Means to Induce Achievement Scarcity: Standardized Testing and Tracking

The widespread use of standardized tests and the assumptions of the so-called "normal curve" of distribution automatically creates winners and losers. On a norm-referenced test, not all students can win. In fact, the bell-shaped curve has been called by Tyler (1974) the wrong frequency distribution to assess learning.

The public has become so brainwashed about standardized testing that a situation in which all children are learning and succeeding and therefore are scoring above the average is referred to derisively as the "Lake Wobegon" effect. Lake Wobegon is a mythical land in Minnesota, based on the novel by Garrison Keillor, where everybody is always happy and everyone is above

average. The fact is that standardized tests create artificial scarcities, particularly when the alignment (or match) between any local curriculum and any standardized test is quite low. The largest variable that accounts for student gain has little to do with schools at all. It is the socioeconomic level in which the student and his or her family is located (Fowler & Walberg, 1991).

Tracking or ability grouping, which results in permanent groups of students receiving a different curriculum that is diluted on the lower end, is also an evil. Tracking has pernicious effects on creating whole classes of students who are "warehoused" until graduation time. A large percentage of such students are African American or Hispanic. So the system is racist, as well (Hickerson, 1966, pp. 19-22).

Tracking was introduced into U.S. schools as large numbers of immigrants were entering the nation. Combined with the doctrine of social Darwinism and the idea that the older white Protestant majority was threatened, tracking and ability grouping allowed the "undesirables" to be cordoned off from the others "on the lower rungs" of the evolutionary ladder. One can see the same rationale working today in the resegregation of many legally desegregated school systems.

Tracking not only replicates an unjust society but also reproduces it by convincing large numbers of students they are unfit for the most prestigious positions at the apex of a capitalistic system. In the name of scientific objectivity (using tests as the basis for determining the tracks), the poor are kept poor, and they come to believe that the fault is theirs (special causes) instead of common (system) causes. Although Deming is condemnatory of educational practices that create winners and losers, he never takes his criticism of both business organizations and schools to the larger society and its power/knowledge requirements to maintain inequity in the workplace (see Giroux, 1988, pp. 192-195). He keeps believing that business and the schools can be changed without altering larger social structures. Giroux (1988) would call this the classic dilemma of liberal educational reform—that is, how to democratize the school without moving into the larger social arena, which is not democratic at all (p. 193).

Site-Based Management Can Lead to Suboptimization: Reform Without a Theoretical Base Teaches Nothing

Much of current reform emphasizes the idea of parental involvement in localized decision making at the school level. At least 44 states have permitted or mandated some form of site-based management (Herman & Herman, 1993).

Yet it should be obvious that breaking a school system into its parts and encouraging those parts to innovate represents a real threat of *suboptimization*, the condition that results when one subpart of the organization is succeeding *at the expense* of the entire organization.

Suboptimization is likely to be a problem when tests are used to assess complex learning that is to be acquired over many years in a school system. If each school becomes a school system, the possibility of significant breaks in what should be a focused and continuous progress curriculum are significantly expanded. Much of the reform fanfare about site-based management is pure romanticism, hovering on the idea that "small is better" no matter what. But this idealism is not the case when schools must work together to fuse a common curriculum that is focused and connected *across schools* in order to maximize achievement. Deming's cautions about suboptimization appear to be applicable in this scenario.

A second aspect of Deming's (1986) work is that experience per se teaches nothing without a knowledge and theoretical base (p. 317). It is not surprising that the thousands of local school-site councils struggling to improve achievement have had little to do with really affecting student learning. Most councils, including their administrative leaders, lack much of a knowledge or theoretical base to engage in deciding what will enhance instruction. Early evidence on the capability of site councils to affect learning shows no significant difference (Malen, Ogawa, & Kranz, 1990; Quinn, Stewart, & Nowakowski, 1993) and would reinforce Deming's view that experience by itself teaches nothing. American business already has learned the mythology of improving production via "quality circles." Kevin Cooney, a vice president of Whirlpool, Inc., which has dropped quality circles, noted: "Quality circles

don't drive quality." Instead, workers in quality circles ended up debating "the color of paint in the restroom" (Naj, 1993, p. A12).

To engage in changing these facets of U.S. educational systems means systemic change. It means taking on the rhetoric that schools are not competitive enough. It means confronting the *syndrome of inspection*, which has become the hallmark of the accountability movement with calls for more and more testing. It means challenging the "national goals" as hollow symbols and political posturing without any knowledge of the means to attain them. And it means tackling the elitism that exists in many U.S. school districts that insist on tracking and ability grouping to the detriment of the entire public educational system, a clear testimony to the evils of suboptimization. U.S. public schools can never be transformed until the system of education is severed from its tacit role of reproducing a social structure that is at its heart inequitable, unjust, and racist. Deming's concept of "win-win" can never be made a reality until existing social hierarchies reproduced in the schools are transformed into community support agencies.

It is no wonder that American business initially rejected Deming (Gabor, 1990). His radicalism strikes at the heart of school and business operations. Although his management philosophy has been easier to implement (see Willis, 1993) than his educational philosophy, it is the educational perspective that has the most potential of transforming schools and school systems.

Deming and Curricular Issues

Deming does not directly address mainstream curricular issues. For example, he never discusses what kind of knowledge schools should include and/or teach. He does not directly address instructional methodologies.

It is not difficult, though, to build a case for the kind of curriculum and instructional practices Deming would support, based on his previous assertions about educational systems.

For example, Deming would be opposed to some students being taught "high-status knowledge" while others were taught only "low-status knowledge." High-status knowledge would be

those things embedded in both the formal and the hidden curricula that only the "gifted" students or the so-called "top" students would receive in a fixed-tracking planned school.

Deming would be more apt to support an experiential core curriculum that would emerge as a result of cooperation. He would be supportive of a broad array of instructional methods because that is the only approach with which all students could be "winners." It is obvious that one instructional approach will not work equally well with all students. If some students are disadvantaged with one approach, others will be advantaged. Such a system inevitably would produce the "winners" and "losers" Deming finds objectionable.

To design a school wherein all children are "winners" will require a complete transformation of the school as it has come to be known in the U.S. and elsewhere in the world. We call it a *learning place.*

Although the "common" school was designed for everyone, the school nonetheless failed large numbers of children rather regularly (Greer, 1972). The common school was never a place where all children succeeded. Deming's learning place transformation would change this.

The Deming Learning Place Versus a School

From the principles of organizational optimization wherein everybody "wins," it is possible to piece together a conglomerate snapshot of the Deming learning place, as follows.

A Celebration of Diversity

The Deming learning place would not be monocultural. A monocultural school would place some students at a competitive disadvantage in the school's programs. The Deming learning place would honor cultural diversity. Each child would approach the school on a "level playing field" where culture, language, and environment would not result in the children being considered as

"less intelligent," "less human," or "less worthy" as human beings. A true celebration of diversity would forthrightly challenge the overwhelming *androcentrism* (male domination) of schools (see Bem, 1993).

The Construction of an Experiential Core

Children in the Deming learning place would all participate in a common experiential core. It would not privilege one group of students over another by accepting knowledge claims that tilted the playing field in favor of one group over another. "Elite knowledge" as embodied in the ideas of cultural literacy (Hirsch, 1988) would be rejected in favor of an experiential core that recognized cultural diversity as the key. Knowledge claims rest not on false claims to superiority, but on claims toward those things deemed more generic to all peoples and cultures.

Wide Use of Different Teaching Methods and Strategies

The Deming learning place would employ a wide spectrum of teaching strategies and methods. These strategies would be employed to enable all children to be successful. Teachers would use peer teaching, coaching techniques, independent study, mentoring, and small group work to augment heavily the lecture-test dyad prevalent in schools today.

Incorporating the Concept of Community as the School

The Deming learning place would abandon all forms of tracking or grouping that pitted students against one another and created "losers." In its place would be activities that create community, an overall synergy of purposeful group dynamics centered around learning for the sake of learning, without the prod of grades or of being rated/ranked/grouped by grades or ability grouping.

The Deming learning place would most likely be nongraded and team taught. Grades or norms are artificial and serve to place some children at a disadvantage. The concept of "fast" or "slow"

children is related to "expected progress" within grades in a graded school (see Anderson & Pavan, 1993).

Abandonment of Competition, Control, and Containment as the Modus Operandi of Schools

Schools are one form of custodial social institution. As such they emphasize control and containment. Control is both overt and covert. The movement of students by external cues in bells, hall passes, and monitoring and policing of nearly all student activities from going to the bathroom to eating lunch are part of the institutional control patterns of schools. Youthful exuberance is contained. School routines become lived rituals legitimizing external social control by sanctified authorities. Students come to "accept" as a natural state the monitoring and direction of their lives. This is part of the "hidden curriculum" of the schools (Apple, 1982). Competition by students for letter grades from teachers is a form of "divide and conquer" strategy to keep students in line and represents the capability of the school to reward and punish compliance and deviance (Waller, 1932).

In short, the Deming learning place would become a non-school, a place but not an institution. That change will require a thorough transformation, rather than a tinkering with the status quo. It is to this end that we aim the remainder of the book.

Key Terms and Concepts

Artificial scarcities and standardized testing. The practice of creating "winners" and "losers" based on standardized-testing norms and assumptions regarding the appropriate statistical frequencies in which only a few students are reported as successful.

Community/"win-win" activities. A collection of people (students, adults) engaged in a common effort to attain goals that benefit the entire referent group. Individual actions are judged on their effects in enabling the group as a collection of persons to attain objectives/goals that benefit everyone.

Competition/"win-lose" activities. Any activity that emphasizes individualized responses as appropriate over group responses and that results in only one "winner" and many "losers."

Correspondence theory. The idea that schools reproduce social inequities exactly because they parallel the existing socioeconomic hegemony of the larger society. Students thus are trained to accept inequality as "natural." The social status quo is thereby preserved.

Hidden curriculum. Curriculum that is taught covertly through "lived experiences" that rarely are made explicit in lesson form, such as the "naturalness" of competition in human life and the idea that somebody always wins or loses as a result.

High-status knowledge. Knowledge that only an elite part of society is expected to learn and that that part of society is deemed "most valuable" as a consequence. Tracking excludes some students from access to or learning "high-status knowledge."

Lake Wobegon effect. The situation wherein nearly all group averages are reported above the test norm averages. Presumed to be violative of the "normal curve" and "normal distribution" of responses.

Letter grading. The school practice of assigning the letters A, B, C, D, F to student work. These letters approximate the standard deviations in a so-called normal distribution of student ability.

Line balancing. Refers to the metaphor of the "assembly line" in which certain parts of a product to be assembled are defective or require reworking; used in schools to refer to the practice of grouping or remediation.

Metanoia. A Greek word Deming uses to express the concept that organizations and the individuals in them must "repent" or "reorient" themselves to a noncompetitive environment.

Monocultural. The encapsulation of only one cultural perspective in the school as proper and legitimate. Based on the presumed superiority of "high-status knowledge" as defined by such persons as Hirsch (1988) in the idea of "cultural literacy."

Optimization/suboptimization. The entire system advances and "wins" in a strategy of optimization. *Suboptimization* refers to the situation wherein only one part of a system is "winning" or succeeding at the expense of the system (or unit of analysis) from being successful.

Syndrome of inspection. The propensity of educators and other business-related personnel to believe that quality can be enhanced by more rigorous inspection instead of by activities that relate to the process of constructing quality. In this relationship, quality is never enhanced in the process per se; it simply is continued and corrected as "rework."

Tracking. The school practice that forms permanent instructional groups or classes based on IQ or achievement test results and that carves a student population into "winners" and "losers."

References

Anderson, R. H., & Pavan, B. N. (1993). *Non gradedness: Helping it to happen.* Lancaster, PA: Technomic.

Apple, M. W. (1982). *Education and power.* Boston: Routledge & Kegan Paul.

Bem, S. L. (1993). *The lenses of gender.* New Haven, CT: Yale University Press.

Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America.* New York: Basic Books.

Bush, G. H. (1992). *The national education goals report: Building a nation of learning.* Washington, DC: Government Printing Office.

Comer, J. P. (1980). *School power.* New York: Macmillan.

Deming, W. E. (1986). *Out of the crisis.* Cambridge: MIT Press.

Deming, W. E. (1993). *The new economics.* Cambridge: MIT Press.

Dewey, J. (1964). *John Dewey on education.* New York: Random House.

Dewey, J., & Dewey, E. (1962). *Schools of tomorrow.* New York: E. P. Dutton.

English, F. W. (1987). *Curriculum management for schools, colleges, and business.* Springfield, IL: Charles C Thomas.

English, F. W. (1992). *Deciding what to teach and test.* Newbury Park, CA: Corwin.

English, F. W. (1994). *Theory in educational administration.* New York: Harper Collins.

English, F. W., & Steffy, B. E. (1992, Winter). Promises of the curriculum audit. *Education, 113*(2), 168-171.

Fowler, W. J., Jr., & Walberg, H. J. (1991). School size, characteristics, and outcomes. *Educational Evaluation and Policy Analysis, 13*(2), 189-202.

Gabor, A. (1990). *The man who discovered quality.* New York: Penguin.

Giroux, H. A. (1988). *Teachers as intellectuals.* New York: Bergin & Garvey.

Glasser, W. (1969). *Schools without failure.* New York: Harper & Row.

Greer, C. (1972). *The great school legend.* New York: Basic Books.

Herman, J. L., & Herman, J. J. (1993, July). A state by state snapshot of school-based management practices. *International Journal of Educational Reform, 2*(3), 256-262.

Hickerson, N. (1966). *Education for alienation.* Englewood Cliffs, NJ: Prentice-Hall.

Hirsch, E. D., Jr. (1988). *Cultural literacy.* New York: Vintage.

Kerbo, H. R. (1983). *Social stratification and inequality.* New York: McGraw-Hill.

Malen, B., Ogawa, R. T., & Kranz, J. (1990). What do we know about school-based management? A case study of the literature—A call for research. In W. Clune & J. Witte (Eds.), *Choice and control in American education: Vol. 2. The practice of choice, decentralization, and school restructuring* (pp. 289-342). Philadelphia: Falmer.

Naj, A. K. (1993, May 7). Some manufacturers drop efforts to adopt Japanese techniques. *Wall Street Journal,* pp. A1, A12.

Oakes, J. (1992). Can tracking research inform practice? Technical, normative, and political considerations. *Educational Researcher, 21*(4), 12-21.

Parenti, M. (1974). *Democracy for the few.* New York: St. Martin's.

Quinn, D. W., Stewart, M., & Nowakowski, J. (1993, January). An external evaluation of systemwide school reform in Chicago. *International Journal of Educational Reform*, 2(1), 2-11.

Sedlak, M. W., Wheeler, C. W., Pullin, D. C., & Cuscik, P. A. (1986). *Selling students short*. New York: Teachers College Press.

Steffy, B. E. (1993). *The Kentucky education reform*. Lancaster, PA. Technomic.

Timar, T. (1992). Incentive pay for teachers and school reform. In L. Frase (Ed.), *Teacher compensation and motivation* (pp. 27-60). Lancaster, PA: Technomic.

Tyack, D. B. (1974). *The one best system*. Cambridge, MA: Harvard University Press.

Tyler, R. (1974). The use of tests in measuring the effectiveness of educational programs, methods, and instructional materials. In R. W. Tyler & R. M. Wolf (Eds.), *Crucial issues in testing* (pp. 143-156). Berkeley, CA: McCutchan.

Waller, W. (1932). *The sociology of teaching*. New York: John Wiley.

Webb, R. B. (1981). *Schooling and society*. New York: Macmillan.

Willis, S. (1993, February). Creating "total quality" schools. *ASCD Update*, 35(2), 1, 4-5.

Wilson, H. B., & Wilson, G. M. (1921). *The motivation of school work*. Boston: Houghton Mifflin.

✧ 2 ✧

The Learning Place

Schools have been constructed around the twin principles of containment and control. In fact, in a 1903 book on school architecture, Felix Clay boldly asserted: "The important matter in any secondary education scheme is not to multiply mediocrity, but to have what Huxley called a 'capacity-catching machine' which will ensure that clever boys will be picked out and efficiently taught" (p. 8). The key words from this passage are *capacity catching, machine,* and *efficiently taught. Capacity catching* implies that the schools will know which students have superior capabilities and will identify and contain them. Implicit in the process is that of culling or sorting students into categories. This process will be *mechanical,* built into the structure itself so that it does its business automatically. The words *efficiently taught* connote a type of teaching that is not only mechanical but also inexpensive.

The fact that these indices appear in a book regarding school architecture means that the connotations are given permanence in brick and mortar, shaping the temporal/spatial world children will live every day in schools that embody them. Containment and control require a curriculum built on inert knowledge—that is, information that is packaged and does not require an active learner. Prepackaged knowledge is contained in the curriculum. Curriculum, in turn, is made up of subjects to be taught or dispensed in units, convenient curricular packages coinciding with boxed, equal passages of time.

The idea behind this shaping of an educational system is decidedly undemocratic. All children cannot learn and indeed are not expected to, because the purpose of school is simply to cull those who are "clever" to go with their schooling and wash away the rest. This, then, is the school, an educational place where only a few will be successful *by design* (see Forsyth & Tallerico, 1993, p. 100).

Deming's Challenge to Traditional Schooling

W. Edwards Deming's ideas forcefully challenge traditional schooling by calling for an end to the culling process and to all of the attendant practices that artificially create winners and losers in modern American schools. Unless reformers recognize how deeply ingrained schooling practices are built into the reality of children's lives, most efforts are likely to be simply an exercise in tinkering.

The concept of *schooling* must be transformed. In its stead we propose the *learning place*. This concept revolves on internal assumptions of the child as his or her own "meaning maker." It rejects the idea that children come to school to be taught so that they might learn. Instead it recognizes that all children have been successful learners before they ever entered a school. They have learned how to dress, walk and talk, solve problems, explore, translate their experiences into words that can be communicated to others, express their feelings, and work with varying kinds of physical objects. Children require advice, guidance, encouragement, discipline, and love. They do not have to be forced to learn. Inherent in the act of learning is the notion that it is fun, pleasurable, and worthwhile in its own right. So the concept of *teacher* is replaced with *learning advisor*. Of course, a learning advisor is a teacher, but different from the traditional concept of a teacher. A parent is a teacher, too, but we think that parents are special kinds of teachers. They have been loving advisors, watchers, tendors. Their expectations have been communicated to their children without a written curriculum, final exams, grades, report cards, tracking, or graduations. The learning place simply builds on

these themes and expectations. It is an extension of the best of homes from which creative, kind, and energetic children emerge.

In this respect children are not "wild things" that must be "tamed" by school rules. That tactic is necessary only if children must be molded into compliant, teachable masses of homogeneous clay; this idea is rejected. Children's homes have been "learning places." In them, children have learned some of the most difficult and abstract lessons ever taught in their lives. In them, cultures are continued with customs and beliefs from one generation to the next. These lessons have been learned in context.

A Glimpse of a Learning Place

We begin with a new learner arriving for the first time in a learning place. One of the first activities will be a voice print. In this activity the child's voice is recorded for the computer by means of computer game commands and calling or singing into the voice system, so that it can begin adjusting to the speech pattern and accent of the child. This activity eliminates the alienation that learners of different cultures and languages often feel when entering the dominant culturally defined schools. This print will hereafter begin the personal record system of the child's story telling and recording of activities of the day or week during his or her matriculation in the learning place.

The curriculum for the primary years of the child's experience is explained to the parent or guardian as an integrated set of three themes: exploring, creating, and becoming. These three themes give legitimacy to the early stages of focusing, play, and motivation dynamics that result in the human activity known as *search behavior* (*exploring*). The phase of *creating* is a deliberate attempt to accent the innate creative and expressive qualities in early development that are so rare and stunted in an externally driven, control-based curriculum. The third phase, *becoming*, emphasizes the development of the learner.

There are only two externally identified courses that every child entering the learning place will take. One is called *intelligence*, and a parent or a guardian attends several of its sessions

with the child (see Hill, 1992). This program is a direct attempt through games, puzzles, quests, social interactions, and events that assess and stretch the child's observation, leveling, clumping, and perspectives of his or her environment. Different forms of intelligence are exercised regularly through activities and events.

The other identified course in which every child participates is called *social living*. In this social setting, each child becomes a member of a school family and extends the skills and affect of sharing and caring for others. Every child eventually will be chosen by an older child and by a younger child to become a brother-friend or a sister-friend. Out of these and other relationships, social structure is learned in a holistic and integrated manner. Social living, therefore, is functional and centers activities in the learning place.

The remainder of the learner's time is spent in activities and explorations: listening, seeing, playing, and working to make and create things.

One teacher in the school will serve as the child's learning advisor (see Hill, 1992, pp. 109-112). In this school, teaching will be dominated by the concept of a teacher who takes cues for learning from the child's initiative. In this concept the teacher does not stimulate the child to react (I teach, you learn), but awaits the activity of the child and then responds appropriately (you want to learn, I will guide).

Middle-Range Experiences

The middle-range experience for children in the learning place is made up of three action themes: choosing, acting, and growing. In the middle range, students begin to take more responsibility for the planning of their learning with the parent, learning advisor, other teachers, and mentor. The concept of the individually planned program is a constant development throughout the levels of experience in the learning place.

Choosing is learning experience with subject matters, areas, avocations, and vocations that fulfill the individual's style, interests, and tendencies. *Acting* is the curriculum phase that allows for trial learnings, junior apprenticeships, and quests. This phase allows for imitation, role adopting, and concrete experiences in a holistic and

relevant setting. *Growing* is the curriculum phase that helps the child become self-aware of physical and social/emotional changes and the necessities of health and nutrition and physical and emotional maturity.

Higher-Range Experiences

The higher range experience in the learning place is made up of three themes: producing, deciding, and leading. This range of experience involves the age of making and using materials and services both in vocational and social areas. *Producing* is the creation of a unique product object. *Deciding* is the adult life planning phase of the experience in the secondary learning place. It encompasses vocational and avocational, social and community parts of young adult life. *Leading* is the phase that gives young people the chance to accept and create roles for themselves in home, community, business, and civic arenas.

Leading does not mean simply learning managerial skills involved with budgeting, controlling, supervising, or planning. Leading is conceptualized as understanding how the arts have served to center ideas regarding change in human affairs and how humans view a discourse for living. Leadership is seen in context, not trivialized in "skills." No amount of identifying the "skills" of a Mohandas Gandhi could ever capture the man or what he accomplished without a deep understanding of Indian culture and life (Woodcock, 1971). Leadership in the secondary school cannot be a course. It is, rather, a complete experience wrapped into the activities, encounters, and developmental opportunities found there. Curriculum in the learning place is not a road to be followed or a cluster of courses to be endured, but a series of encounters, problematic in nature, that are deeply reflective and thought provoking. They are called curriculum scenarios and are a blend of the learning styles of the learners, dynamic centers of inquiry in which actual problems must be solved, and true lived experiences. They are lifelike reincarnations of great periods of history. One way to display curricular scenarios is to stage them. Instead of isolated "lessons," they are considered to be "acts" in a staged play (see English, 1989).

The Learning Council

In the learning place, a council of teachers, parents, and learners oversee the environment for learning (see Hill, 1992, p. 117). Studies and charting are pursued to understand the needs and effects of learning place activities. Quality is built into these activities and are not tested or inspected at the end of each—a practice very common in "schools."

Each adult connected with the learning place also has a personal learning agenda that may have a professional emphasis or may have a personal and avocational emphasis. It matters less what the adults are learning than that each has a chosen and self-directed program. As a result of these personal learning programs, each adult continues to gain insights into the nature of learning for his or her students.

Home-Community-Business Linkages

The home is the original learning environment (Hill, 1992, p. 10). As such, it is a warm and facilitating place. The home can furnish holistic learning experiences about language, values, culture, and personal character. In the community the child learns of a larger social milieu for experience through service. An African saying recognizes this fact: "It takes a village to educate a child."

Relationships with business help a child experience the uses of technology in work, the specialized forms of writing, and the technical reading, statistics, computer science, and quality input that occur. In such a relationship the child can learn about the results of work, the interrelatedness of social and economic responsibilities.

Replacing Supervision With Consultation

Supervision in the learning place has ceased to exist. It is recognized as an archaic form of external control and manipulation of teaching. In the learning place, centered on TQE with an emphasis on quality, learning advisors regularly consult in groups

of two to five about the nature of learning and learning-style approaches for individuals and small and large groups of learners. Consultation sometimes may take the forms of joint diagnosis, skill refinement among professionals, and learner observations. The point to be made here is that everyone is a learner in the learning place. No one is a supervisor, and no teachers direct, dominate, and control a monocultural curriculum.

Reflective Learning

Learners keep regular reflective observations on their learning activities and at further intervals engage in analyses of their work. These observations and reflections may be in such forms as logs, diaries, personal journals, and portfolios of work.

In the learning place a book of learnings is compiled that includes at least a one-page learning story from each member of the school. These single-page stories are a telling of a high point or significant experience by each person. Each story is a personal reflection. The stories are regularly read and discussed for what significant learning principles have been represented. Each member may replace his or her learning story with another at any time. These stories collectively represent the principles of learning on which the learning place is rebuilt and improved. It is a kind of cultural *metanarrative* in the same way that myths define every human culture past and present (Campbell, 1973).

When a new learning advisor (formerly a teacher) is interviewed for potential employment, he or she is asked to review the book of learnings and the set of principles and to write a personal learning story for the book of learnings. This technique is one way the learning vision and principles of the school are kept updated and in a constant state of reconstruction. After a member leaves, his or her learning story may be removed. This technique provides an open access to the school vision and learning principles by parent members, community and business members, students, and learning advisors. There is no need to exclude anyone from this vision-making process. Further, the book of learnings can be related to specific areas of study such as the sciences, or it can be

subdivided, creating learning stories around specific issues such as multiculturalism or environment.

Temporal/Spatial Forms

If one were to remove the roof of a school and examine the temporal/spatial relationships revealed, it would quickly become apparent that the dominant aspect is the small cubicles called classrooms. If furniture is included within such structures, the largest desk is nearly always at the front and center of the room. Facing the largest desk, 20-30 smaller desks are arranged. This format has many variations, but the fact that the largest desk is the most prominent is rarely changed.

Furniture and architecture preserve the psychology of "school" as a place of domination and submission. In this place, teaching reigns supreme. Learning is subordinate. By the third grade, the joy of learning, for the majority of students, has been stamped out. It is replaced with boredom, tedium, suffering through long stretches of monotony, drill, memorization of desiderata, and a kind of tension that is unmistakably part of school life.

School is centered on control. Control must take the form of suppression of almost everything that is natural or spontaneous in life. Control is applied externally. Rules become an end in themselves. There are rules for participation, getting in line, walking, talking, writing, playing, going to the toilet, and for what, where, when, and how to learn. The most natural of all human acts, the one that every learner has mastered before coming to school, is horribly mutilated and twisted until some children see themselves as human failures unfit and unwanted in a world that has become hostile to them. "In all education the main cause of failure is staleness," wrote Alfred North Whitehead (1959, p. 86). Indeed, when Whitehead paused and considered the whole educational system, "the broken lives, the defeated hopes, the national failures which result from the frivolous inertia with which it is treated, it is difficult to restrain within oneself a savage rage" (p. 22).

Architecturally the learning place, as opposed to a school, may not assume a distinctive form. There most likely will not be class-

rooms centered on an ideology of control and teaching. Instead there will be more impermanent and flexible forms that can be moved around to facilitate a centering on learning and spontaneity.

The loci of learning activity will find forms in labs, shops, stages, interest centers of various kinds, and large open spaces that can be constructed and deconstructed with ease. English (1989) envisioned schools in the 21st century resembling large live-in stages where complete time zones and cultures can be designed and put into place. Students are immersed totally for short periods in such zones. Rather than curricular objectives, there are curriculum scenarios. These correspond to the idea of "curriculum chunks," explained in subsequent chapters.

The central idea of the learning place is the elimination of a culture controlled by dissemination and authority externalized in the dominance of teaching and the subordination of learning. "Schooling" signifies the continuation of such a pattern.

The learning place replaces the idea of a school. Schools are anachronisms, like dunce caps and declamations. The learning place is designed to retain the innate joy of learning with which every human being comes into the world. It is the most precious and powerful heritage with which we are all equally endowed by our Creator, to echo similar strains from Jefferson's Declaration of Independence. The elimination of the dominance of teaching centered on control is truly liberating. To emphasize what kinds of changes may be in store for educational planners and policy makers, we direct your attention to the next section, which is illustrative of the shift from school to a learning place.

We begin by posing large philosophical issues centered on the premise that the world as we know it is neither stable nor objective. Scientific investigation is just beginning to reveal how chaotic the world is. A consensus is forming that the extinction of the dinosaurs was caused by giant asteroids that hit the earth, thus changing the climate to one resembling a nuclear winter. The brevity of human life may shield us from truly understanding the dimensions of emerging chaos theory. Humans impose narratives of various kinds to create artificially the notion of rhythm and pattern in their existence. When these narratives assume a dominant cultural form, they come to contain the essence of cultural

mythology. Every culture creates a sense of its own importance through religion, government, language, customs, and embedded social rituals such as education. Schools exist to perpetuate a specific cultural pattern. They are neither democratic nor open to serious investigation of these functions. Because they are imposed and closed systems, they move to a dominant form of cultural control and imposition. They must suppress difference, rather than see it as a strength. Difference is threatening, not liberating. All of the so-called "science" of education embodied in much contemporary psychometrics is aimed at norming only one form of cultural experience as "natural" or "legitimate." The idea of IQ is an attempt to validate scientifically one culturally defined view as "natural" (Marks, 1981). The inventor of the IQ test, Binet, never envisioned his procedure as a genetic or biological measure. It became a genetic measure when it left France and moved to America (Marks, 1981, pp. 18-19). This transfer occurred at a time when Anglo-Saxon Americans were threatened by waves of immigrants from Eastern Europe. These culturally different peoples were absorbed into the system of schools but were segregated on the basis of "scientific tests" that showed they were biologically inferior (see Gould, 1981). One result was institutionalized tracking, in which inferior students were segregated away from the more culturally homogeneous white middle- and upper-class Americans. The practice has been continued with both Hispanics and African Americans, leading to school resegregation in many U.S. cities.

The learning place is the strategic lever for social change. It is not a site for preserving cultural hegemony in forms of knowledge that privilege only a few in the upper classes (see Cookson & Persell, 1985). By embracing a multicultural curriculum, it serves to democratize the marketplace for culturally different students, as well as to replace the dominant androcentrism of school (Brady, 1993). On the one hand, the learning place where all children are honored and all children succeed is not interested in perpetuating an unjust socioeconomic structure that maintains the societal privileges of the few. On the other hand, a school does reproduce the society by inventing corresponding forms of inclusion/exclusion in psychology, pedagogy, psychometrics, and curricular practices (see Bernstein, 1990). To replace the school with the learning place

will require taking on some of the significant mythologies that are embedded to protect and extend schools as they are. To do that, educators will have to recognize that the dominant form of schooling embraces a specific political, socioeconomic ideology that is passed off as "natural" instead of as a social contrivance (Apple, 1979). The central mission of the learning place is perhaps best described by Henry Giroux (1993), who wrote: "I believe that any viable educational reform program must return schools to their primary task: places of critical education in the service of creating a public sphere of citizens who are able to exercise power over their own lives and especially over the conditions of knowledge acquisition" (p. 177).

The learning place is an empowered place. It is a place where children direct their own learning and control their own lives. The areas of psychometrics will be dealt with in the last chapter of this book. Curriculum is the subject of the fourth chapter.

Educational Transformation

The magnitude of educational transformation ought to be apparent to the reader after spending some time with Table 2.1. Restructuring has meant a move to site-based management or teacher empowerment. It has not meant substantive change in the "learning-teaching piece" (Murphy & Hallinger, 1993, p. 254). We are not interested in restructuring schools as they exist. We are interested in completely transforming schools into total learning places.

Restructuring and transforming are different, in our view. *Restructuring* implies that some things can be left alone and carried forward. *Transforming* touches everything in the school, and it changes everything. An even better idea is the metamorphosis of schools. Moving from a caterpillar to a butterfly is what we envision as the striking contrast between schools and learning places.

Promoting Reflection in Action

Transforming schools to places of learning will require critical reflection by those who work in them. This spirit of formalized

TABLE 2.1. Implications of the Shift From School to the Learning Place

From School	*To the Learning Place*
Philosophy	
- from a universe of certainty to one of uncertainty	
- from a universe of laws to one of temporary patterns changing with new information over time	
- from truth as eternal to truth as contextual	
- from a teacher-centered place to a learning-centered place	
- from learning as induced to learning as natural	
- from learning as a monocultural experience to learning as a multicultural phenomenon	
- from learning confined to an approved curriculum to learning as liberating and critical to the curriculum	
- from education as the means to reproduce society to education as the lever for societal change	
Psychology	
- from learning as passive to learning as active	
- from one definition of "approved" learning to many definitions based on the idea of multiple intelligence	
- from learning that is centered on behaviors to learning that is moral, spiritual, and humanistic, focusing on interior development of the whole human	
- from learning as largely didactic to learning that is inductive	
- from learning that is confined largely by curriculum to learning that defines the curriculum	
- from using competition as motivation to enhanced self-understanding, competence, and cooperation as motivation	
Pedagogy	
- teaching changes from "telling" to "advising" and mentoring	
- the control of teaching shifts from the institution to the discipline of inquiry and teaching how to inquire	
- classroom strategies shift from creating homogeneous masses to creating greater diversity by recognizing differences	

(Continued)

TABLE 2.1. Continued

From School	*To the Learning Place*

- from techniques of whole class instruction to those of small group and individualization
- from projects within method to projects as method
- from "discipline" as imposed to "discipline" inherent in successful learning

Psychometrics

- from standardized testing to authentic assessment
- from labeling and tracking to diagnosis and help
- from required ideas of failure to all children learning (from the bell curve to the J curve)
- from norming and "normality" to multiple norms
- from cultural elitism (or cultural literacy) to cultural pluralism as "normal"
- from testing children on monocultural and gender-biased facts to multiple forms of assessment that are multicultural and gender free and deal with problem-solving capabilities
- from a belief in genetic superiority supported by "objective science" to cultural democracy that recognizes science as one kind of narrative among many and not "objective"

Curriculum

- from curricular "engineering" to curriculum as values and open-ended questions; curriculum is politics
- from curriculum as one road for all to curriculum as defined by and encompassing difference
- from curriculum as "correct" content to curriculum as process first and content second
- from curriculum as goals imposed upon the learner to the learner's goals and education as the means
- from curriculum as "outcomes" wherein behaviors are separated from the experience to curriculum as the experience not to be isolated by behaviors or totally defined by them

inquiry means looking at what schools really do, rather than what they say they do. It means questioning everything schools do (see Heckman, 1993). Nothing should be sacrosanct. To engage in this kind of sustained examination, an outsider may be necessary to act as a mediator or guide. The presence of a trained mediator will help reduce staff defensiveness and attain consensus on an action agenda for change. Various techniques of organizational development may be employed to facilitate the process (see French & Bell, 1973). The details of that cognitive agenda are sketched out in the next chapters.

Key Terms and Concepts

Bell-shaped curve/J curve. The "bell" or Gaussian curve is considered to be a "normal" distribution for intelligence. Many educators and critics argue that it is not appropriate as a frequency distribution to measure learning or achievement. The desired frequency is a "J" curve (see English, 1992, pp. 63-91).

Book of learnings. A collective set of personal narratives or stories that summarizes the essence of the learning place. Everyone in the school contributes a personal story to the continuing book of learnings.

Consultation. The term that replaces the old superior-subordinate concept of *supervision.* It implies a more collegial and interactive kind of relationship.

Containment and control. The twin prongs of school operations when students are viewed as passive bottles to be filled with "knowledge." Because humans naturally become active to reach out and interact with the world, they must be denied this previous route to acquire information and must be retaught that school learning is different.

Cultural mythology. The idea that all human cultures, past and present, create narratives about themselves that glorify, beautify, and privilege their superior position over those who lack similar

beliefs. Because none are privileged, the only alternative is to honor them all in some intellectually honest fashion. Schools are least flexible about the cultural myths they perpetuate.

Curricular scenario. Somewhat like a "curriculum chunk," instead of objectives or outcomes of a curriculum. Usually involves, in traditional thinking, more than one unit of curriculum and indicates some sequencing in dealing with the time issue. A "scenario" is sensitive to the concept of "learning style."

Learning advisor. An adult or a learning peer who is assisting, helping, guiding a learner on his or her quest to understand and engage a topic of interest and worthiness.

Learning council. A joint problem-solving group of teachers, parents, and some students who determine the kinds of activities to be pursued in various learning programs.

Learning place. A site where learning is dominant and teaching is subordinated to the learner retaining an active joy in learning. It embodies the idea of empowerment of learners to direct their own lives and not to have to "fit" the given stratified social structure cut out for them. Inherent in the site is the idea that children engage the world and construct their own "meanings" from that pursuit.

References

Apple, M. W. (1979). *Ideology and curriculum.* London: Routledge & Kegan Paul.

Bernstein, B. (1990). *The structuring of pedagogic discourse.* London: Routledge.

Brady, J. (1993, April). A feminist pedagogy of multiculturalism. *International Journal of Educational Reform, 2*(2), 119-125.

Campbell, J. (1973). *The hero with a thousand faces.* Princeton, NJ: Princeton University Press.

Clay, F. (1903). *Modern school buildings.* New York: Scribner.

Cookson, P. W., Jr., & Persell, C. H. (1985). *Preparing for power.* New York: Basic Books.

English, F. W. (1989). A school for 2088. In H. J. Walberg & J. J. Lane (Eds.), *Organizing for learning: Toward the 21st century* (pp. 89-97). Reston, VA: NASSP.

English, F. W. (1992). *Deciding what to teach and test.* Newbury Park, CA: Corwin.

Forsyth, P. B., & Tallerico, M. (1993). *City schools.* Newbury Park, CA: Corwin.

French, W. L., & Bell, C. H. (1973). *Organization development.* Englewood Cliffs, NJ: Prentice-Hall.

Giroux, H. (1993, April). The promise of public schooling in Clinton's America. *International Journal of Educational Reform,* 2(2), 176-179.

Gould, S. J. (1981). *The mismeasure of man.* New York: Norton.

Heckman, P. E. (1993, July). School restructuring in practice: Reckoning with the culture of school. *International Journal of Educational Reform,* 2(3), 263-272.

Hill, J. C. (1992). *The new American school.* Lancaster, PA: Technomic.

Marks, R. (1981). *The idea of IQ.* Washington, DC: University Press of America.

Murphy, J., & Hallinger, P. (1993). Restructuring schooling: Learning from ongoing efforts. In J. Murphy & P. Hallinger (Eds.), *Restructuring schooling* (pp. 251-271). Newbury Park, CA: Corwin.

Whitehead, A. N. (1959). *The aims of education.* New York: Macmillan.

Woodcock, G. (1971). *Mohandas Gandhi.* New York: Viking.

✧ 3 ✧

The Learning Model for the Learning Place

The learning model for the Total Quality Education learning place is based on three distinct strands developed by Hill (1992):

- Self-readiness
- Competence
- Inquiry

The model that emerges is the name for an internal developing core of experience, a kind of experiential curriculum that occurs in each of us throughout our lives. It develops and changes or stabilizes as our internal picture of ourselves in our world changes. As a result of this internal core development, all of us hold beliefs about ourselves and others, and we all have a context of memories that we constantly fill or revise because of our perceptions or introspective examination.

We as humans have a set of potentials to do, make, and build that is our resource of competencies. And we have a learned style for confronting and coping with each new or revisited situation in our lives. These make up the internal curriculum of our experience; this is true for infants, children, teens, adults, and seniors—for each one of us our whole life long.

The learning model for the learning place represents a unified field approach that underpins the broad and multiple views of

knowledge, truth, change, and the relation of the individual to society (see Hill, 1992, pp. 27-41). This unified approach explains the multiple nature of human experience, its seeming inconsistencies, multiple truths, and the mysterious and unfinished nature of being human. No one must let singular or even so-called "scientific" explanations of humanity become dictators of his or her total reality. Psychologists, philosophers, and intellectuals may choose narrow and polemic views of what humanity is or might become, but educators must avoid words that rigidify it. Learning is too malleable, too unfinished, even fanciful to be cast in stone. What may be rigidified may potentially become something even better or more beautiful.

Biological Origins of the Personal Curriculum

Within a few hours of our birth, pediatricians, experienced nurses, psychologists, and parents can discern differing tendencies of a newborn child to act and respond to its environment. Newborns differ in their activity level, the rhythmicity of their bodily functions, the focus or distractibility of their attention, their approachability to new things in their environment, their attention span, their energy of response, their response to differing levels of stimuli, and their general mood quality.

As these responses continue to develop, pediatricians and parents begin to note different types of infants. Three such types have been named the "easy" child, the "slow-to-warm-up" child, and the "difficult" child (Brazelton, 1969). These are not so much fixed categories, as they are different global approaches to environment that indicate we all differ in developmental ways. This labeling serves a purpose of distinguishing and working with differences, but would immediately concern educators that the self-fulfilling expectation cycle might get started here, especially in the connotations of the meaning of the terms *difficult* child or *easy* child.

As time passes for the child, specific experiences in culture and relationships with parents and others begin to create an internal curriculum of memories and perceptions through which each of

us experiences a different world and a different microculture within our family environment.

Variance of Individuals

Although all of the actions of the hours-old infant form a whole, they are identifiable throughout the child's growth and development years. Research (Thomas, Chess, & Birch, 1968) has tracked these variables until at least age 12 in a sample of children. These eight observable actions are:

1. Activity Level
2. Rhythmicity
3. Distractibility
4. Approach/Withdrawal
5. Adaptability
6. Attention Span
7. Intensity of Response to Stimuli
8. Quality of Mood

These eight actions surely act as a whole, and each contributes to four domains:

1. The Self Domain
2. The Readiness Domain
3. The Competence Domain
4. The Inquiry Domain

These four domains make up the learning model for the Total Quality Education learning place. The model is comprehensive. It proposes that we learn nothing in isolation. We learn in relation to our view of ourselves; our picture of our past experience; our abilities to behave, perform, make; and our approach to each event of our lives. What each person learns from each event is an interaction within all four of these domains.

The Self Domain

We believe that the self domain is comprised of three layers: (a) the expressive self, (b) the socialized self, and (c) the transcendent self. We believe this is a convenient structural and hierarchical picture of the self domain that will describe and integrate all of the domains of the core experience. Self-concept has been found to be related to school achievement and success (Germinario, Cervalli, & Ogden, 1992, p. 5).

There is some sense to the notion that the expressive self is earliest, less socially defined, and more basal or primitive than the socialized self domain and therefore is the bottom "layer." The transcendent self is the part of internal self-hood involved with higher causes, perhaps secular or religious or in Maslow's (1970) concept of "self-actualization." If this world of the transcendent self does not take a spiritual form, it may be seen in the joining of a larger group or mission in life. Such larger experiences may be sacred or secular, the latter including political and special interest causes such as environmentalism.

Humans are innately social. Indeed, we could not survive our birth and lengthy, dependent childhood if it were not for the care we receive from parents and the community of people into which we are born. Our social identity is often called our "self-concept" because it is the ideas we hold of ourselves through the reactions others give to us. We learn to act altruistically because we first are cared for and loved by those beyond us. This caring we soon learn to reciprocate. Just as adults are able to find satisfaction and fascination in relating to and feeding a child, a transcendent part of them that also recalls their early selves, so too the child, imitating and radiating the energy of self, learns to be confident and humane, thus human. It is a process endlessly repeated.

Responding to this humane world, the child is socialized into his or her own background of family, community, ethnic identity, political values, and norms. The social network adds to an individual's competence to develop morally within his or her immediate social contacts. Fears of differences, if present, are related to fears in self or to one's own lack of readiness, lack of understanding, and lack

of trust to explore the new and different. Risk and trust derive from a background of caring (see Rokeach, 1960).

Social value and justice are the developing decisions and actions in competence that grow out of love and the dilemmas of social life confronted through inquiry. Decisions to act socially and justly are derived from attempts to see ourselves as other humans in a dilemma similar to our own. Treating others as you would hope to be treated derives from our first instinct to love. Later it culminates as part of the self-curriculum in the transcendent yearning for universal meaning. To do for others as you would want them to do for you is not just a religious aphorism, it is a universal human transcendent ethic born first of our parents caring for us and then of our responding to them in kind. This principle may come to permeate one's life. Teaching such a universal adage directly by lecture or sermon is only a pale hint of how profound this human transcendent meaning can be. It may even be contradictory.

Social immorality is the opposite of the experienced caring relationship. It is manifest where self-centeredness becomes a defense against the absence of "other" human caring. The aggression of the carjacker becomes a taking of things with no real personal response to the human beings involved except to dominate, to intimidate, and ultimately to discard the victims. This action may, for a very short time, give one a sense of power; a strange, inverted way of providing one's own self with things, materials, power over others. It may be considered to be a pitiful form of self-love, an attempt by an alienated, amoral person to wrench a tiny, fleeting bit of false satisfaction through an inhuman act.

The artistic source of the self domain is the often spontaneous or expressive childlike qualities of open wonderment and simplicity about experiencing the world around us. This is the flexibility of the neophyte to see spontaneity in things as they are; to name things anew; to find, at first blush, fresh combinations and relationships of things that may even appear humorous.

Much of the artistic creativity in us becomes debilitated by the roles and expectations imposed on the social self. These become routinized over time. This stifling of spontaneity makes creativity appear to be a rare quality found only in some learners. It is certainly not a rare quality of children whose self-worth has not

been suppressed. A darker side of creativity is the anger exhibited in destructive activities. Perhaps this is why many of us find pictures of bodies, explosions, and natural disasters, such as hurricanes and floods, so compelling. Creating and destroying seem paradoxically locked together. If educators are to provide for the creation and re-creation of society anew by educated children, schools (learning places) will be required to expand the creative potential of learners.

The Readiness Domain

Piaget (1950), Erikson (1950), Kohlberg (1981), and Hunt (1971) have described conceptual and moral development and have arrived at very similar sequences in stages of development. The first seems to be a stage of self-centered sensing and acting on the world. The second stage occurs where symbols can represent things, where persons seek authority as a base for right behavior and actions. The third stage exists where individuals act in autonomous, flexible, innovative ways, depending on the situation. Decisions at this stage are ethical in terms of the situation or problem encountered. Other conditions, as well as these stages, fill out the construct of readiness used in the TQE learning model.

Readiness is based also on the extent of past learning and experience. Observing, listening to others, sharing, and playing at a task before a learning encounter ensure a more oriented, less fearful, and better state of readiness for a child.

The learner who has studied, found meaning in, and acted on his or her prior school subject work is readier to pursue new ideas and tasks of the subject discipline. Readiness also includes learning style and the perceptual and cognitive strengths that can be brought to bear on a new learning situation (Keefe, 1987). A learner who understands how to learn, who knows how to get organized and use information, has a built-in readiness advantage.

Readiness also includes environmental supports for the child. The environment includes physical conditions, as well as social conditions—for example, good food, loving parents, and empathetic fellow students. The learning environment includes expectations

for success, the ability to take risks, and comfort with one's self. The learning climate attends to involvement, caring, and respect (Ogden & Germinario, 1988).

The confidence to take a risk, study a subject, make sense of and derive meaning from experience sums up the psychological readiness of a child to engage in learning. The antithesis, unreadiness, is evinced in the first place in the debilitating action of being brash and intimidating as a defense when confronted with a novel social or learning setting. A second manifestation of unreadiness is the grasping at playing school in an attempt to influence others with any substance to learning activities. A third condition of unreadiness is withdrawal from learning and its setting. The effects of withdrawal lead accountability reformers to focus on absenteeism, school dropouts, and destructive behavior.

The Competence Domain

Competence is the inner capacity to perform a skill—to engage in an action, behavior, or sequence of actions. Competence is enhanced by innate ability, but it is also a learned and acquired ability that can be focused and brought to action by personal commitment and will power. Competence is not external. It is the inner repertoire of potential for action.

We see four levels to competence. The first is a *state of incompetence.* This is a state of unknowing, wherein the learner may be unaware of his or her requirement for ability. As one old joke goes: "Can you play a mandolin?" "I don't know. I've never tried one yet." This stage of unawareness or lack of competence engages the readiness domain through such things as modeling, demonstrating, and even mimicking the actions of others.

Given sufficient awakening of awareness of their incompetence, learners move to the second level. At this point a learner is at least *aware of his or her incompetence.* Here the learner can initiate the steps of learning in relation to a specific task to be learned or a body of knowledge to be acquired. With a beginning competence here, the learner can enter the third level, that of *conscious competence.* In this stage one can perform more and more organized

behaviors—for the maximization of learning that is safe and free from too much distraction. At the appropriate time, the learner shifts into the higher, fourth level of competence even within a stimulating, complex, or perplexing context.

Despite the world being interconnected with somewhat contradictory stimuli, the learner who has reached a competent state can perform organized behaviors even under adverse conditions. The learner also can perform in a very personally stylized and creatively competent way that is in harmony with the situation and that is artistic as well.

The Inquiry Domain

The human is constantly buffeted with questions. To be alive is to wonder and to want to discover answers. The first and simplest of explorations of the world about us through inquiry starts from the query, "What is this?" It is often a nonverbal question posed by a pointing of the finger. The 2-year-old points through the car window at the huge train crossing in front of the family automobile. The loud horns and the flashing lights are puzzling, perhaps frightening. The child, having no word to name (and tame) this new thing, looks to his or her parent for a response. With this most primitive of all inquiry, all children proceed to respond and tame the encountered world with names (Freire, 1970, p. 76). Each child creates a first level of social knowledge. Later each will make the same simple and childlike inquiry in learning French, Chinese, or German. In some of these cultures, finger pointing is considered to be offensive. Children also will learn not to point to the object. Thus children learn to name things, as well as learn their first level of cultural knowledge. In many school subjects, children will be given names and technical terms and spelling-word lists. They probably will be told the name "chemical bonding" so that this particular scientific concept will be more easily controlled by them in their memory. In fact, to be given the name of something is one of a child's first acceptances of socializing, identifying, conforming to, and continuing or preserving the society and culture into which the child was born.

Later the child may create new meanings or connotations for these words (names of things), and so modify or change society and culture. Given such names without a sufficient readiness domain condition within the child is oppressive and is likely to make the thing harder to remember and recall (Hill, 1992, p. 40).

There are many subquestions to identify inquiry. Learners may elaborate with these questions: What is it made of? What are its components? Is that one of them? Is that another one? Which one does not fit? This simplest first level of inquiry is known as *identifying*.

The second level of questioning leads beyond naming to *defining* things, sometimes when they are not present or concrete. Questions of this defining inquiry may be, What does it do? How does it work? What makes it do that? How can it be described? How does it differ from other things?

The third level of inquiry through questioning may be called *exemplifying*. Here learners are searching for and becoming acquainted with instances, examples, analogies, and metaphors. These examples may be personal, abstract, or concrete. Learners may work backward from a real instance to create their own definitions or identifiers. Koko, a gorilla who was taught a 200-word vocabulary by means of sign language, when given a radish to eat for the first time, nibbled it, threw it down, and signed to her human, "red hurt," an appropriate name and definition for a radish. On seeing a videotape for the first time of ducks swimming, she signed, "water bird water." These were her "new" names for concrete events, items, and examples in a gorilla's perceived world.

Asking *how* and *what* may lead to imagined examples and useful analogies or models. The story of the discovery of DNA's molecular structure is the story of looking at the *X* in an electron micrograph and confronting the question of what it could be. The answer was a three-dimensional double helix that Watson (1968) and others were observing from the side in the flat, two dimensions of a photograph. A handmade model of wooden blocks and wire finally offered them an image of the answer to their questions: What is its structure? and How does it work? Three Nobel prizes then followed.

The fourth level of inquiry through questioning is called *amplifying*. This is the form of inquiry in which comparisons, analyses, and

associations come into play. These are addressed by questions such as: How does one thing relate and connect to another? What do they do together? How are they different? Alike? In amplification we also seek to know why—Why is it good? Why is it necessary? Why is it significant? A person examines a thing for its own integrity and merit and then its goodness or worth by comparing it to external standards. Here one works with the moral and social level of inquiry. One tests internal standards of a thing and contextual or situational standards as well.

This amplifying level of inquiry is essential in the internal dialogue of a learner to create and re-create meaning within the personal experiential core. Here learners relate their new explorings and experiences with their resources of memory in the readiness domain. They also examine their self domains and the social definitions of themselves that they use for convenience. They sort through their competence domains to polish and refine the things they can do. There are many models of inquiry. Common to them all, inquiry is a fundamental human urge. Inquiry is a drive within humans to be curious, a fascination with things novel and unknown, and an urge to make meaning as a human being.

Four Teaching Themes

Now that we have explored the four major domains within the TQE learning model, we turn to the generic kinds of teaching themes that would match the domains. Note that we have started the discussion of the learning model with learning and not teaching, objectives, or even outcomes. The learning place is centered on learning, and therefore its educational model must be congruent.

Contrary to some prevalent myths by policymakers, board members, legislators, or administrators, *classroom teachers do not cause learning*. Saying that classroom teachers cause learning is equivalent to saying that medical practitioners cause healing. Learning, like healing, is an internal biologically and psychologically rooted dynamic just like growth, which occurs within people. There are internal and situational "teachers" of our core experiences, and these, in turn, are facilitated by good classroom

teachers in traditional schools or by learning advisers in learning places.

Emotion, experience, action, and the *unknown* are the four internal and situational "teachers" of personal learning. They are the interior and situational influencers by which meaning and intention are constructed by the learner, a principle first enunciated by Comenius in 1642. Each of these is at once a dominant teacher of one of the four domains of the experiential core and also an integral part of the whole response to learning.

Emotion as the Teacher of the Self Domain

Emotion is the teacher of the self domain of personal learning. Each person validates events by his or her interest in or apathy toward such happenings as they unfold. Our feelings are a personal teacher of those experiences that are most meaningful to us. Our emotional reaction selects and raises our awareness and responses described in the first level of what has been termed the *affective domain,* seeking and responding to stimuli (Krathwohl, 1961).

If we pay attention to our emotional state in each confrontation, we learn that feelings give us commands of warming and cooling. Thus we are drawn toward some things and not others: math or foreign language, classical music or country, Victoria West or William Manchester. The list is as long as each experience event that one person encounters in an hour, a week, or a lifetime. Out of this milieu of warm and cool personal reactions to events, we respond, express, and identify ourselves in our experience. Glasser (1990) refers to this inner image of ourselves and our context as our "quality picture." Should something fall out of our quality picture, we may no longer find it motivating or meaningful. So schooling is, for many young people, not a part of their quality picture. It is a place to take (and mostly to fail) tests. Glasser suggests that once something falls out of our "quality picture," it cannot be redeemed.

A lifetime of taste, preference, expression, and even vocation may result from our warm experiences or our own quality picture. It is, at its root, a loving response to some things in which we see ourselves mirrored or fulfilled and not to others. The great golfer Arnold Palmer alluded that it was a fascination with golf that

motivated him. The impersonal object captures the personal subject through the latter's response to it. In John Dewey's (1913) work, the self finds itself in the content. Emotion teaches us our likes, what we identify with, who we are. And those things within our quality picture reinforce us and display to us and to others "who" we are.

Experience as the Teacher of the Readiness Domain

Just as emotion is the teacher of the self domain of the experiential core, experience is the inner teacher of our domain of readiness. Memories, mental pictures, and acquired responses are the experience carried within us as we meet new life events. The learner's readiness in a curricular area includes the prior learning and school-based accomplishments that the learner brings to each new event (Bloom, 1981). But this background is not only remembered academic information. This background is diverse and entails one's totality of experience; one's community, cultural, and ethnic identity; and the wholeness of one's priorities, norms, meanings, and expectations. The learner also brings a predetermined level of maturation coupled with his or her total repertoire to such encounters (see Sternberg, 1985, pp. 5-29).

The saying, "Experience is the best teacher" is easily related to learning some things, such as playing tennis in a tournament or being a school principal. In the case of a foreign language, some scholars have suggested that 1 week in an authentic other-country language and social environment is worth 26 weeks of classroom study (see also Carroll, 1985). Somewhat more obliquely connected are less structured experiences in other places or countries, urban centers, forests, social events, or symphonies. A wide array of experienced events provides an image, a web of memories and meanings by which to apprehend new events.

The teacher "experience" develops our readiness. We bring memories, past learning, and mental constructions to new experience, limited, of course, by emotion, the teacher of our self domain. Those things in which we have experienced success and identity (the domain of self) are more readily available to our recall as experience. If our "quality picture" does not include mathematics

or its utility, then nothing we study will seem to "stick" in our short-term or long-term memory. Those things in which we have experienced defeat or fear, we may not recall or remember with a paralyzing rejection when confronted by a new learning event.

The power to remember and take advantage of all of our experiences is influenced by our emotions, by our own development and readiness, and by how meaningful such experiences have been. Experience as a teacher invites us to ask the question, What do I remember? (What is this? What meaning does it have? Have I encountered this before?)

Action as the Teacher of the Competence Domain

Action is the preeminent instructor of the competence domain (see Hill, 1992, p. 31). Individuals may learn about something, but they never completely understand until they learn how it works. A practical question is, How can I use this? One definition of learning even has been stated as the "development of meaning which leads to action" (Mendenhall & Arisman, 1951). Action is the consummate reflective teacher of meaning. It also forms the basis for the power of teaching as an active form of learning, as in peer coaching or peer teaching. Peer teaching involves putting into effect one's own understanding to help another learn.

The basis for action in learning involves a reasonably clear notion of self, a search among one's action repertoire that enables one to be responsive, a commitment, and execution. Execution may involve an act of inner courage. Even people who have acted courageously in one area may be reluctant in a new area. For example, Winston Churchill's (1950) initiation as a painter began with his gazing at an empty canvas. Despite the fact that he had knowledge of colors and perspective, he could not quite get up the gumption to put brush to his canvas. Churchill wrote of an impatient woman who cut to the quick of his inertia when she took one of his brushes and blobbed on some blue while saying, "There, now that's the sky." The same drama is present moving from one physics problem to the next in a lab assignment. The will to act may portend a deep reach into the domain of self to find the

resilience to begin. The inner reach is the source of going beyond ourselves. It entails grabbing hold of our deep life energy to act and knowing who we intend to be when we take this action. Churchill intended to be Churchill the artist. The child with the physics problem must reach past his or her understanding of physics and experience of the last problem, cope with the unknown ingredient in any new problem, and reach into the will of the self to choose to make meaning, to be a physicist, and to engage the unknown one more time.

Action also has an element of the unknown and needs a creative response, though perhaps one not so concrete as the empty canvas before Churchill's eyes. A decision to act is followed immediately and nearly continuously by adjustments and the validation of one's behavior to be successful. The internal process of reflection may be something along these lines: "I think I can do this." "But I despise these kinds of problems." "Maybe, if I . . ." "Hey, it's working!" "That sure looks right." "That's it for now. . . ." Sequences of behaviors over time begin to coalesce while one's control of those behaviors consciously becomes more remote, to even more latent channels, to metaconscious hegemony, to automatic guidance. For example, the changing and meshing of gears in driving a car follows each of these action states to an automatic level. Expertise is a result when a person successfully engages in automatic responses to enough different problematic situations to become a teacher.

Action as a teacher of the competence domain of our experiential core is subject to the other teachers of the self and the readiness domains, usually experience and emotion. As the learner acquires a broader background, a range of increasingly wider actions becomes feasible. For instance, watching a home repair program on television, examining a paperback book on the subject, and talking to someone who has done it all contribute to a background of experience for tackling a repair project of our own.

Practice perfects not only by making better but also by increasing the personal stock of examples and possible actions, "arrows for our quiver," some of which are analogous to others. For example, handling the gear shift of a tractor is more like driving an

automobile than guiding an oxcart. Conversely, driving oxen is more like handling horses than handling a car. John Steinbeck wrote in his novel *The Grapes of Wrath* of the Oklahoma farmer who used all of his savings to buy a car to take his family to California. Never having driven before, the farmer forgot what to do a few hundred yards down the road from the car lot at an intersection. Despite yelling "Whoa! Whoa!" his car ran on through and crashed.

Experiencing a wide array of situations provides a wide array of possible responses to novelty, rendering the unfamiliar event recognizable, at least in outline. Here again, emotion also influences one's choice and commitment to action. If you perceive a present event as similar to one in which you have failed in the past or something you have never experienced before, you may suffer a depleted source of self-strength to act. You may decline or deny the situation or yourself. If you have experienced much success and positive emotion about yourself and a fascination and interest with events similar to this in the past, you may choose to act in the new situation with great relish and a sense of enjoyment.

The Unknown as the Teacher of the Inquiry Domain

The unknown as teacher influences the inquiry domain. This domain of inquiry includes problem solving and the creative response (see also Papert, 1980). Novelty has always been a stimulus for learning outside of ourselves. Novelty and curiosity are intimately related. Some occupational fields—the sciences, for example—have made novelty a watchword in searching for clues to confront the unknown.

Some common human events wherein novelty teaches are the wonderment: the entrancing experience of a child's first view of snowfall, a deer in the woods, or a catchy or profound phrase. It might even be the saying in a Chinese fortune cookie. The philosopher Eric Hoffer (1952) even recounted his anxiety as a migrant worker confronting a different crop to be picked. Some events involving novelty as a teacher can be frightening: an overturned boat, strange sounds in the night, shadows on the wall. Whether we are simply curious or fearful, the unknown is rarely boring.

Such events often include an unanticipated twist or a confrontation with the unexpected.

In situations involving inquiry and problem confrontation, we can recognize quickly the combined impact of the other three teachers. *Emotion* may cause us to be fearful of novelty. *Experience* may give us the background and confidence to explore something new and to evaluate it correctly or falsely as similar to a past encounter. *Action* as a teacher may help us prepare for a novel event, provided we have dealt sufficiently with our competence, our past practice, and our preparation skills.

Why is the question of novelty, inquiry, and problem events. *Why* is the interrogator that uncovers assumptions, connections, and relationships. *Why* is the "frame jumper" that can take us behind the event to our assumptions, and behind those assumptions to the roots and causes of the event. It is the deconstructor of events to their plainest form.

Novelty is in the eye of the beholder, and educators should not fear it in moving toward constructing a school curriculum chunk that includes it. For example, Poundstone (1988, p. 22) notes that two computer scientists in the early 1970s discerned that many kinds of logical problems were really the same problem in disguise. Even within frameworks of dissimilarity, strands of continuity may be present.

Linking Situational Teachers to the Domains

What we have shown in our educational model are the "purest" forms of teaching situations that prompt the work in the four domains. The situations themselves become the didactic teachers in much the same way that programs of "thinking skills" work today (Banks, 1991). Within these forms of teaching based on learning concepts, the learning place may be framed out in much the same way as a house is constructed: first in its skeletal form, and then brick and plaster added to fill it in. The next chapter deals with how to move from these skeleton frames to a whole in the process of arena planning and curriculum chunking.

Anticipating Results

It is inappropriate to conceptualize the results of implementing a learning place as either objectives or outcomes. As we discuss in the next chapter, objectives too narrowly conceived or stated draw down the expectations and leave out too much worthwhile curricular territory. For example, in the area of social-emotional growth, behavioral objectives are nearly inadequate to link faculty actions to student growth and later measurement. Nearly always, indirect measures are inserted as a kind of "halfway" compromise.

Outcomes are too "black box" oriented, having come from economics and simple "input/output" mechanical models. Outcomes imply that the model works without understanding "how" it works. Deming (1993) rejects this logic by insisting again and again that unless one can answer the question "By what means?" an exercise in stating outcomes, results, or whatnot is largely symbolic and dysfunctional (p. 48).

Some Reasonable Expectations

Let us examine some broad types of learning results for the TQE learning model to implement the learning place. We describe:

- The Productive Human
- The Spiritual Human
- The Social and Moral Human
- The Creative Human
- The Intelligent Human
- The Unfinished Human

We discuss in chapter 5 evaluation of the results. It should be obvious that an array of nontraditional measures will have to be developed and implemented to fully include the broad and complex expectations of our learning model.

The Productive Human

One result or state expected from the implementation of the learning place embodying the educational model presented in this chapter is that of the productive human. The traditional school curriculum centers mainly on *what*. The competence domain of the experiential core is not only learning *what* but also *how*. This shift will increase a person's ability to take action. Words and actions constitute real learning (Freire, 1970). The real state of the productive human, however, comes from finding the alignment between personal style and self-identity and those things in our world that we find inherently interesting, that express our capabilities, and that we are "good at." Personal interests, vocational talents both real and hidden, and experiences help us sort out the direction of our productive adult occupational lives. The fortunate students are the ones who experience many possibilities. They encounter experiences in which they see much, try things, and experience diversity within the family or a professional career, or interact with relatives who have mastered a trade or have run a small business. The unfortunate, with fewer models within the family or extended family network, often perceive only social evils at work—prostitutes or drug sellers, for example. They may resort to models for productivity that are illusionary media images, such as sports heroes or beauty pageant queens, or those whose personal economics stem from criminal behavior or winning the lottery.

The TQE learning model as it pertains to the productive human draws from the self domain for interest, style, and motivation; from the readiness domain for a ground of experiences and adult models; from the competence domain for learned behaviors and academic knowledge applied in vocational directions; and from the domain of inquiry for the means of testing and discriminating genuine interests and values from unfounded whims.

The Spiritual Human

The spiritual side of humanity is enhanced by an altruistic view of self and the human community and its problems. A growing, intelligent, moral, creative, and productive human naturally

begins the inward journey of the growth toward personhood (Buscaglia, 1978).

The spiritual side of being human is prompted usually by the ultimate question "Why?" That very question transcends the reality of the moment and forces a look at the more fundamental ground behind a given phenomenon. A further *why* question forces us to consider the reasons or assumptions behind the first explanation. If we could ask the question *why* to each answer to a previous *why* for five times, we would soon grope for meanings and explanations beyond our narrow personal knowledge and control.

In search of love, justice, freedom, work, and deeper meaning, the human seeks something more—a transcendent beyond himself or herself that brings these things together into a personal cosmology that provides reassurance and stability. Such a cosmology embodies a higher, more altruistic principle of living a morally justified life. The more one knows (experience and competence domains), the more one inquires and the greater the gap becomes between the known and the unknown, increasing the desire to understand at some level.

The truly educated person is self-confronted with this search. Some of the answers are contained in the world's great religions. The learning place can be a place where the answers provided by these great religions can be studied, even in a public school. The U.S. Supreme Court has never banned study about religion. It has banned being indoctrinated with a religion or teaching only one religion as "the answer" in public schools. The spiritual human can be nourished in a public learning place. It is time for such public places to be a legitimate arena for persons to develop and encourage the community, the family, and the parent to help the child grow spiritually, to foster the altruism and centeredness of personal human growth, self-actualization, and personhood. Such growth can occur without a theistic theme being embraced as well. Altruism existed in human affairs long before all of the great contemporary religions were brought into being.

The Social and Moral Human

For some time, schools and their communities and parents have negated their responsibilities to address the social moral conse-

quences of education. These entities have attempted to sterilize the schooling experience of s cial and ethical education in the name of individual rights or an outright fear of offending various minorities from the left or the right. The result is now a visible moral malaise, a drift away from anything resembling a moral anchor except immediate gratification within a massive consumer culture. Within this same culture, some 12 million Americans cannot find enough to eat. As many as 50% of persons aged 65 or older fail to include adequate food nutrients in their diets (Parenti, 1974, pp. 11, 13).

The value of education as a socializing tool is still apparent only to primary grade teachers. Upper grade teachers are apt to see socializing as a threat to serious "academic studies." A competitive culture deemphasizes the communal bonds that bind all of humanity together in common quests and dilemmas. A pyramidal society most often sees social bonding as a threat to its continuing hegemony. Too often, what many mean by learning socializing skills is to accept all forms of given authority as legitimate without questioning any of them. In this the schools cannot continue to foster blind obedience.

The Creative Human

The creative or artistic human responds to an unknown different from that found in intelligent problem solving or social and moral dilemmas. The unknown of creativity and art often provides a divergent, novel, inventive, or expressive response from humans. The spirit of play abounds in the creative human. Buckminster Fuller, the creator of the geodesic dome, was mirroring the angles and geometry he found in nature in beehives and in molecular structure. His "invention" was a reinvention of things he found in nature. In another reinvention, the creator of the joints in NASA space stations fell back on the round blocks of his childhood Tinker Toys™ set to design an all-purpose one used in building such structures. So, in the creative response, the human returns to the transcendent level of the self domain, where he or she senses himself or herself inseparable from the creative character of the natural world. The artist feels the kinship of being a creative actor in a creative and open-ended universe.

The Intelligent Human

Learning is ultimately an individual and personal meaning-making endeavor. It involves a whole person in a learning episode through a blended curriculum of self, experience, competence, and inquiry. During learning episodes we connect with who we are, all of our past memories and our curiosity and courage to face and explore something new. A learning episode may be long or short, but it involves our new self, the self we are becoming, by our emotions and experiences, by the fitting and refitting of behaviors in action, and by our cognitive/cultural selectors. These processes represent how intelligence fulfills its own destiny of becoming more intelligence.

The old-fashioned notion of intelligence as represented by a score or percentile rank derived from a person's competitive paper-and-pencil performance on an instrument designed to measure three or four variables of mental activity is outdated. This older usage of intelligence was turned into a tyrant of categories, a Procrustean bed for squeezing or stretching individuals until they fit. This tyranny is just one shortcoming of the socially engineered, controlled curriculum we are trying to abandon in the school.

Real intelligence focuses on the capacities underlying the TQE learning model. It assumes that intelligence is manifest through a variety of intellectual activities and applications employing the four domains of the learning model. One may act intelligently through problem solving by having much experience with such problems, or one may be innovative with the same situation, or one may bring to bear learned and focused actions.

The Unfinished Human

The TQE learning model does not describe an ideal, complete, or finished form of the educated human. Such "new person" constructions, whether made by Fascist or Communist states or Utopian philosophers and psychologists, are examples of dogmatism at work to perfect humans by engineered means. If such "isms" as feminism, environmentalism, or humanism are cast as a struggle between classes or societies, they, too, are authoritarian

means to categorize people as good or bad. They are oppressive to the human spirit and are always incomplete and wrong. The unfinished and unexplainable human will always exceed and disappoint our explanation, for these Utopian "isms" are words masquerading as real human qualities. Symbols are always incomplete abstractions of the reality of the human experience.

The TQE learning model is not the end to be sought, but rather the beginning, a broad introductory framework by which we may discover how people learn and what it means to be educated. Bruner (1966) phrased this inquiry with three questions: What does it mean to be human? How did we get that way? How can we become more human?

In this chapter we deal with how to encompass the movement from a traditional school to a TQE learning place. The chapter serves as a bridge from Deming's ideas through the development of curriculum, which is the subject of the next chapter. The TQE learning model enunciated in this chapter began with a focus on the learner and quickly moved to how teachers as advisors, mentors, and guides might respond. We see it as a beginning and a sketch, rather than an end with detailed finality included.

All of the work regarding change indicates that change is a process, not a product. We anticipate that during the process of moving from a school to a learning place, those involved will see different visions, incorporate different ideas, and create in new ways. All of that is to be encouraged.

Key Terms and Concepts

Competence domain. The area of the curriculum concerned with the capability of the learner to acquire all kinds of skills: verbal, perceptual, physical. *Competence* refers to the entire range of skill acquisition, the learned repertoire in any given area of human learning and application.

Dominant teaching themes in the TQE learning model. The dominant or matching teaching themes for the TQE learning model are emotion, experience, action, and confronting the unknown.

Inquiry domain. The area of the personal curriculum that centers on asking and answering questions of increasing difficulty and complexity.

Readiness domain. The area of the curriculum concerned with understanding learning sequences in moral and intellectual development so as to better understand how the learner sees things and how the learning place can become more effective in promoting learning based on maturation and insight.

Self domain. The area of the curriculum concerned with the developing human concept of the private and public person as seen by others. The result of work in this area is the self-concept. The self-concept is more or less stable, subject to change and influence from one's peer group and social context.

References

Banks, J. R. (1991). *Selecting a thinking skills program.* Lancaster, PA: Technomic.

Bloom, B. (1981). *All our children learning.* New York: McGraw-Hill.

Brazelton, T. B. (1969). *Infants and mothers: Differences in development.* New York: Dell.

Bruner, J. S. (1966). *Toward a theory of instruction.* Cambridge, MA: Belknap.

Buscaglia, L. F. (1978). *The art of being fully human.* New York: Fawcett Columbine.

Carroll, J. B. (1985). Second-language abilities. In R. H. Sternberg (Ed.), *Human abilities* (pp. 83-101). New York: Freeman.

Churchill, W. (1950). *Painting as a pastime.* New York: McGraw-Hill.

Comenius. (1642). *A reformation of schools.* London: Greene Arbor.

Deming, W. E. (1993). *The new economics.* Cambridge: MIT Press.

Dewey, J. (1913). *Interest and effort in education.* Boston: Houghton Mifflin.

Erikson, E. (1950). *Childhood and society.* New York: Norton.

Freire, P. (1970). *Pedagogy of the oppressed* (M. B. Ramos, Trans.). New York: Continuum.

Germinario, V., Cervalli, J., & Ogden, E. H. (1992). *All children successful*. Lancaster, PA: Technomic.

Glasser, W. (1990). *The quality school*. New York: Harper & Row.

Hill, J. C. (1992). *The new American school*. Lancaster, PA: Technomic.

Hoffer, E. (1952). *The ordeal of change*. New York: Harper & Row.

Hunt, D. E. (1971). *Matching models in education*. Toronto: Ontario Institute of Studies in Education.

Keefe, J. (1987). *Learning style: Theory and practice*. Reston, VA: NASSP.

Kohlberg, L. (1981). *The philosophy of moral development*. New York: Harper & Row.

Krathwohl, D. (1961). *The taxonomy of educational objectives: The affective domain*. New York: McKay.

Maslow, A. (1970). *Motivation and personality*. New York: Harper & Row.

Mendenhall, C. B., & Arisman, K. (1951). *Secondary education: Guidance, curriculum, method*. New York: Sloane.

Ogden, E. H., & Germinario, V. (1988). *The at-risk student*. Lancaster, PA: Technomic.

Palmer, A. (1965). *My game and yours*. New York: Simon & Schuster.

Papert, S. (1980). *Mindstorms*. New York: Basic Books.

Parenti, M. (1974). *Democracy for the few*. New York: St. Martin's.

Piaget, J. (1950). *The psychology of intelligence*. New York: Harcourt Brace Jovanovich.

Poundstone, W. (1988). *Labyrinths of reason*. New York: Anchor.

Rokeach, N. (1960). *The open and closed mind*. New York: Basic Books.

Sternberg, R. J. (1985). *Human abilities*. New York: Freeman.

Thomas, A., Chess, S., & Birch, H. (1968). *Temperament and behavior disorders in children*. New York: New York University Press.

Watson, J. (1968). *The double helix*. New York: Atheneum.

✧ 4 ✧

Curriculum Planning

The TQE learning place will take a different kind of curriculum from that used in the traditional school. The TQE learning place will not "privilege" so-called cultural literacy because that has been shown to be a form of cultural elitism (English, 1992, p. 86).

Cultural elitism is based on the idea that society has been frozen at a certain point in its development so that the "most important" features of it can be recognized. In fact, no such "freezing" of a society is possible except in dead ones. A growing society is always sifting and reprioritizing its agenda and linguistic habits (Milroy & Milroy, 1991, p. 22).

Rejecting Static Curriculum Models

With this in mind, a static curriculum model cannot be selected for use in a TQE learning place. Such a model would "ground" its assumptions in social stability and the existing social hierarchy. TQE learning places will reject this premise on several counts:

- The existing social order is neither perfect nor equitable in its fundamental structuring of people or cultures contained within it.
- The existing social order is itself potentially transformational—that is, it is in the process of constant change with the possibility of revolutionary change always present.

- The social order maintains its power relationships by extending class privileges based on wealth, which, in turn, perpetuate inequalities that already exist.
- Schools are the agents of social reproduction in the social order. Changes that pose a threat to this reproductive process will be the subject of vigorous political and economic debate and suppression.
- The primary purpose of the curriculum in schools is to perpetuate and reinforce the socioeconomic status quo.

Nearly all curriculum models assume that the schools and society should be closely linked. The rationale offered is that students should have the "skills" necessary to obtain jobs or pursue higher education after graduation from high school (see Hall, 1969). This proposed linkage ignores the fact that the existing social order is pyramidal, undemocratic, elitist, racist, and sexist in its composition (see Darder, 1991). So any model of curriculum development that accepts the status quo as the appropriate platform on which to write a curriculum will, by definition, reinforce the system, inequities and all (see Katz, 1973).

For this reason, no curriculum planning model that intends to fulfill the Deming agenda of no "losers" can hope to succeed simply by accepting the status quo as the most desirable of all possible worlds. Children cannot be made to "fit" that world because that would mean making some of them "winners" and the bulk of them "losers," inasmuch as that is the way the "real world" works.

So the existing job market must be viewed as both temporary and undesirable as the basis for a genuine Deming curriculum planning model. Children are not viewed as objects to be fit into the school or into the existing social order.

The place to begin thinking about creating a curriculum model is not the world as it is, or even the world as the futurists think it will become on the basis of current projections extended into some point that does not yet exist. The place to begin creating a curriculum is the world as we would wish it to be. In turn, the "wished for" world involves sifting through a host of values that are embedded in philosophy.

Rejecting Scientism and False Objectivity

There is no such thing as a "value-free curriculum." All curricula, overtly or covertly, contain values. So the curriculum is always contested grounds for answering the question, Whose values shall be included and excluded in the creation of curriculum?

There was a time in curriculum development theory when creating a curriculum was considered to be a neutral activity, somewhat like engineering. That view has been abandoned as unrealistic, a supreme myth. Science is shot through with values and biases and even its own form of metaphysics. The view that science has no values has been called *naive realism* (Lincoln & Guba, 1985).

Teachers face fundamental value questions every day in their work spaces. Says Maxine Greene (1971), "Day after day—unless he [the teacher] chooses to remain 'scientific' and impersonal—he will find himself asked to make particular choices, urgent choices; and no one, in or outside his school, will be able to tell him with certainty that his choices are right or wrong" (p. 150). Scientism is false science. It promises certainty when there is none. Schools are one of the places in our society where values are both taught and contested. The struggle for power within them and over them produces a constant social tension. A TQE school will not magically resolve such tensions. Nor are TQE learning places value neutral or value free.

Planning Systems: Ethico-Political Expressions

Because schools are not value-neutral organizations and because they exist within a social order that locks them into perpetuation of the status quo, planning systems must be seen first and foremost as ethico-political expressions. *Ethics*, the study of appropriate values and conduct, are aligned with the appropriate political apparatus of the state (Eldersveld, 1989). Schools fit into the system of influence that exists to perpetuate those in power. From this confluence comes Michel Foucault's idea of *power/knowledge* (Gordon, 1980).

Knowledge is produced within a power relationship, so knowledge may be said to be relational. Knowledge is not so much

discovered, but produced. It is a creature of the network that gave rise to it. According to Foucault, truth is always embedded in these relationships and can only be considered as a part of them, not out of context.

Planning systems are permitted to rise within power/knowledge relationships. As such, they are limited expressions of values in context. No plan can exist outside of these social power/knowledge relationships and expect to influence activities for which it was developed to define, direct, or evaluate. For this reason, most planning systems reinforce the explicit or implicit values that the planning process includes. Most planning systems are therefore profoundly tautological and end up as expressions of the status quo.

The Deming TQE learning place will have to avoid embracing a curriculum that is exclusionary and resorting to tracking to maintain its integrity because of its alienating qualities for lower-class students (Page, 1991). The Deming learning place will have to conceptualize a curriculum that is open to possible interpretations other than the majoritarian one. The Deming learning place will have to conceptualize a curriculum as contested, not closed. And planning models to create the Deming curriculum will have to reject premises that tacitly make the same assumptions.

This requirement is a radical one. The designation of curriculum in most schools begins with a logico-empirical premise that there is a process to decide the most "important" things to be learned. Such procedures are based on consensual processes that end up identifying an elite body of knowledge "to be learned."

The problem is that such elite processes exclude those often meant to be "served" by the schools: the poor, minorities, disenfranchised segments of society. Unless these parties are brought into the school and their viewpoints considered along with their values, the curriculum "selected" by any process is usually lopsidedly against their children being successful.

The true Deming learning place and its curriculum face a stacked deck on this account. Western history going back to Homer's *Iliad* and the battles between Achilles and Hector stand out as the centerpiece against which elite prep schools and college preparatory public schools anchor their curriculum models. The anchor shifts in both the "comprehensive" high school and the vocational

technical school to "jobs" on the available job market. Both of these approaches reinforce the prevailing socioeconomic power structure. Neither model is radical, nor will it change the "winners-losers" posture of the public schools that use them.

Reexamining Learning and Teaching

Reopening the debate about how and what to embrace in a learning-place curriculum (with a definite agenda not to select knowledge that is intrinsically discriminatory and not to teach it in a way that reinforces socioeconomic class division) has not been done systematically since Dewey tried to conceptualize a school built on Roussian ideas of children's "natural development" (Dewey, 1902/1962).

Learning is an active process. Lower-class children particularly reject a passive role in learning. They respond negatively to long periods of inactivity. They also reject the idea that the teacher is the solitary "expert" on learning, so they also tend to reject the idea that only the teacher is allowed to talk. Teaching, in a majority of lower-class children's classrooms, has been compared not to directing, but to "surfing" a discussion (see Page, 1991).

Surfing a discussion connotes that there is no permanent boundary for a curriculum. Such boundaries are antithetical to the idea that all knowledge is open to debate and interpretation.

Dewey premised that the school curriculum should be centered on activity and direct experience. Instead of a discrete body of facts that must be learned, Dewey (1902/1962) indicated that, envisioning the child as an active learner (and a kind of important self-teacher), the child would be "led into reading, writing, arithmetic, geography, etc., by his own desire to know" (p. 17). And what is it the child would want to know? Notes Dewey, "Each of the subjects of the curriculum should be given to the child to meet a demand on his part for a greater knowledge of relations than he can get from studying objects" (p. 17).

In this model of curriculum based on student interest and learning, the curriculum is not presented, but rather unfolds in the

natural act of learning something inherently interesting to the learner. The Deming learning place that is focused on eliminating winners and losers will move inevitably toward a different concept of curriculum, as shown in Table 4.1.

The elimination of losers involves elimination of not only competition but also the way educators have come to envision curriculum or knowledge. If a view of curriculum nearly automatically places some children "at risk" of failing, then the viewpoint itself should be discarded. That is the case with curriculum. Eliminating school-defined students as social losers involves a radical shift from one perspective to another. The Deming learning place, to truly discard ideas that create permanent social-educational losers, will have to abandon many traditional concepts of what makes a "good school."

TQE learning places that eliminate competition, elitism, and winners/losers will not be worried about so-called "world class standards" because, as Deming points out, "standards," like goals themselves, never improve quality.

The elimination of standards or the statement of national educational goals of which Deming has been so critical (1993, p. 46) portends a change in planning models for those educators interested in creating a TQE learning place.

Arena Planning and Nonlinear Models

Traditional educational planning models have been anchored by the necessity for developing specific behavioral outcome indicators as measures of organizational or school performance. These, in turn, are based on economic models of organizational functioning and general systems theory that can be traced to biological models (Wenninger, 1975, pp. 23-31). Such traditional planning models invariably end up becoming static in nature, and as society continues to move and change, the planning model shifts to an increasingly rigid, authoritarian, and unresponsive modality.

Furthermore, traditional planning models impose an order that may not actually be present in any society. In this respect,

TABLE 4.1. A Comparison of Curricular Models in the Traditional School and the Deming TQE Learning Place

The Traditional School	*The Deming TQE Learning Place*
Curriculum is stable.	Curriculum is fluid.
Curriculum is factual.	Facticity is contestable.
Curriculum is objective.	Objectivity is a myth.
Curriculum is value free.	Curriculum is value centered.
Curriculum is historical.	Curriculum is nonhistorical.
History makes sense.	History is an invention, a grand imposition.
Curriculum should be good for all children. What is common is the "core."	Some curriculum is bad for some children; a "core" is antithetical to natural development.
Curriculum should teach students the essentials.	Curriculum is learning. What is essential is negotiable in context.
Children should experience curriculum.	Experience becomes curriculum.
Learning should be orderly and logical.	Learning is decidedly chaotic and messy.
It is possible to decide ahead of time the essentials to be learned in a curriculum.	Importance of the curriculum is always negotiated by the learner in context.
Curriculum can be decided apart from the learner and prior to instruction; it is impersonal.	Curriculum is what the learner decides to accept; it is always personal and immediate.
The role of the teacher is to present the curriculum.	The role of the teacher is to help the child encounter and appropriate the curriculum.

planning models are like "glasses" that planners see through. Most planning models are rooted deeply in sets of assumptions that are structural in nature or paradigmatic. Planning is a kind of story or narrative that is superimposed on the world.

The Deming learning place must avoid the use of such models because they impose an order that reinforces the kind of competition that creates winners and losers; in fact, such demarcations are necessary and "natural" in society and in its schools. The Deming value set is that competition must be replaced with cooperation. Cooperation must eliminate winners and losers, particularly approaches based on artificial scarcities. It is within this mind-set or "the way the world should be" that planning must be conceptualized in the Deming learning place.

We have chosen to call this kind of planning *arena planning* because it:

- Rejects specific behavioral outcome indicators as too narrow and rigid to be of real use in improving schools
- Rejects the concept of a stable society on which learning outcome indicators can be constructed and the idea of downstream assessment anchored to such indicators
- Rejects the idea that there can be a "curriculum core" as anything but an artificial imposition on a reality that has no core, is disparate and chaotic
- Rejects simple biological and economic models as reductionistic and invalid for humans or their complex social world

Arena planning posits the following assumptions about the world and schools in it.

1. *The World Is Disorderly and Indeterministic.*

Reality is overwhelming to most humans. It cannot be perceived directly in toto. It is simply too large and too much. Humans reduce the amount of reality to perceive by delimiting what is "allowable perception." They do this, first, by rejecting the idea that reality itself is overwhelming and the idea that the only real reality is that which can be measured by observation. This rejection eliminates anything that is "subjective" as not scientific or worth considering in an educational plan. Second, they reduce reality

further by imposing a curriculum that is a special kind of box only allowed in schools. Schools can only embrace a small part of reality. The idea of constructing a curriculum is itself reductionistic. Above all else, implicit in the concept of *curriculum* is order (stability).

Arena planning assumes that any preconceived order imposed on reality is a human construct and, though necessary, should be recognized for what it is: a social convenience of a temporary and negotiable nature. World events are not determined prior to perception. World events are undetermined and unplanned in the sense that one would comprehend planning.

2. *The Essential Element in Planning Is Controlled by the Learner, Not by the Teacher.*

Traditional planning places the institution in the hands of the teachers who control instruction. Arena planning reverses this relationship and places the learner in charge, with the teacher working to capitalize on an innate capacity, extending it into expanded disciplines, domains, and knowledge without drill, propaganda, or "teaching" as it is traditionally conceptualized as telling.

In this perspective, outcomes cannot be specified ahead of time. Ranges of possibilities can be anticipated. These ranges comprise the arena. An arena is simply broad bands of possibilities open to be pursued, not units or themes to be taught first and learned second. Arena planning begins with learning first and places teaching second.

3. *There Is No Pressure to Reduce or Define a Core Body of Knowledge as Essential for All Learners.*

Arena planning assumes that any plan premised on reductionism is an aberration, a false projection of somebody's narrative that should be exposed as simply one of a kind of story told by a variety of storytellers, some of whom can be people called "scientists."

Core curricula are artificial creations based on static models of reality that cannot be verified as true or reliable for very long. Core

curricula are the imposition of somebody's (the teacher's, the board's, the state's) educational synchrony that are human constructs superimposed on a fluid reality that exceed and dwarf it. Every society has its myths that engage reality in falsifying it (Haggerson, 1993). The function of schooling is not to perpetuate these myths as traditional planning most often does, but to teach children to recognize them and to understand them, even to be able to critique them, without necessarily rejecting them outright.

The main idea is that the learner is the "meaning maker" in the learning place. No socially imposed body of knowledge external to the learner is uniformly imposed on him or her. Most learners will develop, however, an experiential core of knowledge, attitudes, and even skills that have personal meaning for them so that there is a commonality among learners in the learning place.

4. Higher Order Thinking Skills Are Intrinsically Linked to the Learner's Desire for Increased Autonomy, Independence, and Mastery of His or Her Environment.

Arena planning does not posit that linear models of conceptual development emphasizing simplicity-complexity are useful for curriculum planning. Such models are derived largely from logic, a peculiar form of thinking that some have called a tragedy for the Western world (De Bono, 1980, p. 40). Arena planning is based on the idea that thinking is bound contextually and culturally within the parameters of human language. It does not hold that some linguistic heritages are "better" than others. It does recognize that there are differences and that some of them are more universal than others.

Arena planning begins with an *active learner*, one who has been exploring for the first 5 years of his or her life and has acquired the ability to speak and to use a variety of conceptual-linguistic patterns. Arena planning establishes sets of frameworks of responses and possibilities without defining precisely what should or must be learned at some arbitrary point in time, and without taking into account the developmental phases of human life.

Arena planning is centered on children's experiences. School is envisioned not as a linear set of stairs to be climbed, but as a

web of interrelationships to be explored. Curriculum is designed to be exploratory, inquisitively stimulating, and reinforcing of the natural desire to learn by coming into contact with the physical and mental world surrounding centers of student interest (English & Hill, 1990, pp. 17-18).

So there is structure, but it is a structure into which the child's original conceptual apparatus in learning is extended, rather than squelched. The joy of learning in being more competent, independent, knowledgeable is capitalized on. Curriculum is conceived, not as a linear set of experiences as in grades and units, but as relational to perception, the mind, one's culture, and one's linguistic heritage.

5. *Emphasis Is on Activity and Experience as the Twin Foci to Promote Learning.*

Because an arena planning model is constructed around an active learner, one who gives meaning to his or her experiences and seeks out understanding, it is not possible to prespecify the precise objectives in advance of the activity or experience. It would be folly to write the usual performance objective that stated, "Upon being placed in X situation, the learner will identify the four causes of Y or be able to solve a problem thus and so."

To translate this situation into an educational environment is an exercise in reductionism. It signifies that there is only one legitimate interpretation—only one acceptable result—and that the entire purpose of teaching is to plod on laboriously until everyone gets there in about the same way and in the same time. Such narrow curricular paths inevitably lead to differentiation by language heritage, race, and gender and have resulted in legal restrictions on even using a high school academic transcript in considering a graduate for a job (Heise, 1993, p. A14). Eisner's (1969) notion of "expressive objectives" is an appropriate way to think about potential actions that may be anticipated in arena planning.

Arena planning is not centered on the behavioral acquisitions of skills or on knowledge disaggregated into a body of factual material to be learned whether or not the learner ever had a

question about any of it. Arena planning uses the idea of *curriculum chunking*.

Curriculum Chunking

When school curriculum becomes the captive of small bits of "behaviors" to be acquired, one of the casualties is spontaneity. Curriculum has to be "covered," instead of learning being promoted. The "covering" curriculum metaphor is likened to a road map wherein a certain amount of miles have to be traveled each day in order to complete a designated trip. Such a trip has a definitive end and beginning. The map metaphor is a great one to calculate efficiency. Those who "covered more" obviously learned more, because learning is not defined as the capability to remain in control of one's life, but to indicate how much mileage one has attained in a school.

Schooling is conceived as a largely monochromatic, one-thing-at-a-time experience reflecting a distinctive cultural bias for certain Western societies dominated by the clock (Highwater, 1990), whereas some non-Western societies are distinctively polychromatic and do many things at one time (Hall, 1966, pp. 15-30).

The traditional curriculum is a cultural perspective that is imposed on all students and that is not universal, although a case sometimes is made that elite knowledge is or should be universal (Adler, 1982). Conceptualizing curriculum as an apparatus to "deliver" certain promised outcomes superimposed on a road map metaphor fits nicely into the assembly line of grades, classes, units, tests, and the structure that has produced cultural winners and losers in America. Unless this entire structure is changed, the school will continue producing winners and losers.

Therefore, the road map concept of curriculum is rejected as leading to unnecessary and debilitative competition. It is not merely keeping the school intact and eliminating the obvious forms of competition in them. The curriculum itself is a form of competition, a form of power domination and power/knowledge "over" people that enables some children from some cultures to be more likely to be "winners," and others "losers," in schools.

To accompany the concept of *arena planning*, the curriculum idea that is parallel is that of chunking. A "chunk" is a swath of curriculum that includes many concepts, ideas, values, skills, knowledge, and attitudes. It is a large interconnected fabric of interdisciplinary experiences and activities. It is an area in which learning can occur, with all children finding something of interest. A curriculum chunk is therefore more psychological than logical, a point Dewey (1902/1962, p. 34) made about curriculum many years ago when he indicated that the center of gravity of schools had to change from the teacher, textbooks, and curriculum, to the child.

Although the curriculum may be conceptualized in the convenient "disciplines," or "content areas," it is not presented to the students in that way. That is an inert and meaningless structure and has no intrinsic meaning to a young mind. In fact, the curriculum disciplines do not really exist at all. They are scholarly rubrics created by academics to conduct inquiry and to create boundaries between their work. History, physics, English, civics, and mathematics are not reality at all. They are logico-constructs for teaching, and they have become embedded in school structure over time.

All of the topics listed below can be considered as curriculum chunks, depending on the age of the children involved:

- Transportation and Cities
- The Environment
- Contemporary World Problems
- Heroes and Heroines in the Eastern World
- Westward Expansion and Cultural Conflict
- Life in Prehistoric Times
- Puzzles and Problems Using Numbers and Symbols
- Art, Communication, Graphics, and Secret Codes
- Counting, Banks, Money, and Progress
- Animals, Microbes, and Plants

The potential list of curriculum "chunks" is nearly endless. It is around such chunks that arena planning occurs. The planning is not outcome based in the sense that one can list discrete "behav-

iors" to be learned. The listing of such isolated behaviors leads to a shift in the center of gravity away from learning and toward teaching, mechanization, and organization—schooling as we commonly know it.

The entire means-ends continuum that undergirds schooling is rejected. It is reversed. Instead of the curriculum being the means to objectives, which are the ends, the objectives become the activities and means to determine the congruence of the curriculum chunks selected.

The whole "outcome-based" model is inverted. The activity or experience is both the end and the means to attain it. The meaning of the experience is intrinsically worthwhile to the student. No other outcomes may be necessary or required to justify it.

It would be the same for playing a game of golf. The activity is, in itself, intrinsically worthwhile and interesting to the player. Later it may be justified by discussing the health benefits involved with exercise, or the skills to be acquired in learning to putt, or the arithmetic to be learned to calculate one's score. The outcome is the activity. Learning and excitement exist in the doing of it.

Early learning for children is play. Everything is fun, and almost everything is interesting. Says Deming (1993), "Joy in learning comes not so much from what is learned, but from learning" (p. 148). The amount of learning that occurs from the time of birth to age 5 is unparalleled. It takes place without a school. Little is haphazard about it, however. There are lessons, but no lesson plans. There is a curriculum, but no abstract framework adopted by some board of education. There is mentoring and tutoring, but no bells. There is regularity, stability, and safety, but not in 45-minute periods. A child's home is his or her first curriculum chunk. Arena planning is the construction of a home or suitable environment for the neonate to learn and grow.

What the TQE learning place represents is a learning home that is an extension of the kind of environment many children already have encountered (leaving aside, for a moment, a discussion of nonfunctional or destructive home environments, which certainly are out there in the real world) and in which most are successful. Most children come to school having acquired how to talk, dress, inquire, play, and learn. The phrase "all children can learn" is a

tautology. All children except those physically impaired or emotionally damaged have learned certain basic rudiments before they ever enter a school. It is only school that says all children cannot learn. It is only school that has created fast and slow learners, "dummies" and "bright kids," top and bottom tracks, winners and losers. Humans are learning animals. Some learn that there is not much learning going on in schools. They retreat from being insulted, humiliated, cast aside, denigrated, or considered to be less than adequate. Their anger, frustration, anxiety, and tension fill many schools with violence, both expressive and silent (McLaren, 1986). It is because schools kill the creative spirit and are antithetical to learning that they overemphasize external rewards that Deming (1993) finds so conspicuously repulsive. Gold stars and other rewards lead to "the phenomenon of overjustification" (p. 113)—that is, the idea that an act of learning must end with a prize to be worthwhile.

The curriculum in a TQE learning place will incorporate these elements for learners:

- Students come to understand themselves as humans, as people who live in a specific time, place, and culture.
- Students learn how to apply knowledge.
- Students learn to act in moral and ethical ways.
- Students take responsibility for their social relationships and their own futures.
- Students learn how to learn with their own style and talents. Echoing Deming, Hill (1993) noted, "Every learner has these capabilities" (p. 127).

Rejecting Means-Ends Dichotomies in School

The topics of arena planning and curriculum chunking are intertwined because the planning model embraces a notion of curriculum different from the elicitation of "behaviors." The TQM learning place is a nonbehavioral school. It does not envision itself as a means to specified and measurable ends. The learning place is an end in itself. It should be an intrinsically satisfying experience because it extends

the most natural of all human strivings, "the yearning for learning that everyone is born with" (Deming, 1993, p. 148).

By rejecting the usual means-end (curriculum-school) dichotomy, educators can begin to comprehend how to construct a TQE noncompetitive, restructured school. There will be times when one slips back into the usual means-end dichotomies. One simply has to bring these to consciousness in order to deconstruct them.

Restructuring school to make it a TQE learning place means the elimination of all forms of competition, grades, rewards, and practices based on overjustification. It is a thorough washing out of the fabric of schooling that both educators and parents have accepted as "the way schools are" and that those who were successful in them support as they are and have been in the past.

The Deming TQE learning place would abolish the following:

- Grades or age grouping of students as artificial, a kind of tracking based on a false notion of homogeneity used for purposes of organization, rather than for purposes of promoting learning
- All forms of rewards, letter grades, and the like that lead to overjustification for learning
- All forms of grouping that result in stigmatization based on "ability grouping" and tracking
- A curriculum rooted in elite knowledge that alienates some children from the nurturing environment school is supposed to be and that robs them of the joy of learning
- Teaching based on false notions of success; grading on a curve, distributions, and evaluations of learning that result in artificial scarcities
- Testing with the purpose to stigmatize, label, separate, punish, and degrade on the basis of false ideas of genetic liabilities or deficiencies, mental or physical

In short, the Deming TQE learning place would abolish the normative activities of schools as detrimental to learning and to the society that supports them. In his view, no society can permit the permanent production of "losers" into its body politic without

enormous loss, hostility, destructive forms of suppression, and an inability to remain vibrant and competitive overall or longitudinally. When a complete class of people is excluded from participation in American life, the result is social dynamite (see "America's Blacks," 1991). On this score Deming is very critical of Japanese schooling, even though he is complimentary of Japanese organization and management.

Steps for Developing Elementary Curriculum

Step 1: Identify Key Activities With Which Children Are Most Likely to Engage.

At the entry point for the learning place (or for the school system, if planning is to occur at that level), what are the most likely kinds of activities children will select or engage in? Use "expressive objectives" if some end result is required (Eisner, 1969).

If your school is an elementary school, what are the most likely kinds of activities young children will want to engage in? Children enjoy all kinds of play, socializing, and exploring of things and ideas. They are innately curious and reaching. All of these natural inclinations should be encouraged. Curricular activities that include an active role for the learner to inquire and explore should be identified. These will necessarily be large pieces of curricular territory. Behaviorism and "skills" will be rejected as inappropriate for the TQE learning place. They are too narrow and work against its thrust to turn away from elitism and the "drill and kill" methods that infuse massive boredom in schools and, as Toch (1991, p. 223) observed, actually lower the capability of the schools to deal with curricular rigor.

Step 2: Identify the Curricular Chunks Involved With the Delineation of Activities.

Activities will be multidisciplinary. No attempt to segment learning will be made at the primary levels. Language will not be subdivided into distinct phases. Language will be learned as it has been learned by all children, by imitation in whole form.

The emphasis will be on active engagement, projects, exploration, topics, themes, and curriculum of high interest and intensity that will be absorbing. Discipline comes from the inherent interest in pursuing ideas and projects, not with an imposed or artificial order.

"Lessons" are considerably less formal. Plans for classroom work are more constructing of environments for the pursuit of learning for its own sake than they are imposed roads to traverse or "cover." The teacher is less of a large group presenter (although there may be times when this position is required) than one who is helpful in pursuing a child's interests, in helping the child find resources, and in linking the child to the appropriate points of the customary disciplines. As Dewey (1902/1962) indicated, this process is a "continuous reconstruction, moving from the child's present experience out into that represented by the organized bodies of truth that we call studies" (p. 11).

Step 3: Recruit or Train Faculty Who Are Comfortable With Multidisciplinary Work and With Assisting Students to Learn.

Traditional teachers will find it difficult to work in a school environment that is not normative. Noise levels are apt to be higher. True learning is messy and unpredictable. Teachers who pride themselves on order, lockstep lessons always tightly introduced, cues elaborately staged, and conclusions reached with finality will find life in a TQE learning place, without competition, grades, and gold stars, nearly unbearable.

TQE learning places will not be chaotic because learning is intrinsically absorbing. The major task is to create learning that is so highly motivational and appealing that children will push the teacher aside (in much the same way the very young do to parents who interfere with learning at home) to engage in learning.

Step 4: Construct Learning Environments That Are Stations, Laboratories, or Stages, but Not Classrooms.

A classroom is a social construct wherein the teacher, enshrined as a minor deity, rules over the lives of 20-30 children. A classroom

signifies an imposed order, a lived curriculum of domination, and a normative environment where children are ruled into passivity and ultimate boredom and failure for many.

Learning areas can be considered as stations, laboratories, shops, or stages, but not whole day, every day, rows of seats facing a desk or lectern for knowledge to be "dispensed." Inactivity breeds hostility, tension, and resistance and ushers forth a need for an imposed discipline that is antithetical to learning.

The TQE learning place is a place where learning, not teaching, is king. Teaching is subservient to learning, and the learner is in charge of his or her learning.

Step 5: Move to Open-Block Scheduling.

Learning can be neither compartmentalized nor scheduled. Teaching can be both. Learners are forcibly fit "into" schools. The TQE learning place is centered on learning. The learning place is built around learning, not teaching. Its physical structure is therefore much more formative than summative. There is no final definitive form for learning (see Glatthorn, 1986).

Step 6: Enact Nongradedness as the Rule.

Age-graded classrooms are a thing of the past. Learners are multi-age, and so is instruction. Learners learn from each other. Peer collaboration breeds cooperation, not competition.

Step 7: Abolish Standardized Testing; Replace It With Continuous Diagnostic Appraisal.

Standardized testing is to be junked because it assumes that some curriculum must be learned by all students at specific ages or grades. Such data are based on a meaningless concept of winners and losers, false scarcities, and "norms" based on them.

There is a definite place in the TQE learning place for appraisal of learning: to find out what has been learned so as to guide a student into an appropriate learning activity, to discover any disabilities that hamper or block learning and that will lead to specialized help being provided. Testing children is replaced with

functional appraisal procedures—not to track, ability group, or stigmatize students, but to find more appropriate activities or to discern specific learning handicaps that become the focus for amelioration.

Report cards are different. Parental reporting systems do not give As, Bs, Cs, but instead chronicle what kinds of activities their children have selected, the nature of the difficulty of those activities, learning characteristics and styles, strengths and weaknesses, and any observed diagnostic information that may be helpful for parents to know.

Children are not rated against one another. Children are not rewarded for grades. Learning is its own reward, its own joy, and its own end.

Eliminating Secondary Departmentalization

The American secondary school is replete with all kinds of competition that further accelerate the winners-losers syndrome begun early in the elementary grades. There are contests for class valedictorian, for the "best" this and that, and students are tracked to the "top" and "bottom" of a segmented curriculum.

A true TQE secondary learning place will embrace many of the healthy features of a typical "alternative" high school program, many of which are already in existence in the nation. Such schools stress high-interest, highly personalized projects. Relationships with teachers are more informal and open, less authoritarian. The emphasis in many of these schools is on reigniting the flames of learning that traditional schooling has extinguished. These students have become completely "turned off" in traditional schools. The idea is to place the students into a different environment that is much more like "home" and much less like "school."

The secondary school brings with it a kind of baggage that reeks of enforced competition, not cooperation. A deliberate effort will have to be made to rid the school of its trappings of competition, establishing both the form and the content of cooperative learning. There is at least one international example: Thomas Haney High School in the Maple Ridge-Pitt Meadows School

District in Vancouver, British Columbia (Jenkins, 1993). Traditional classrooms have been abandoned at Haney, and students put together their own daily and weekly learning schedules. There is no master schedule except for advisory group meetings and some curricular specials such as art and music.

The most difficult task will be to construct a curriculum that is multidisciplinary and not departmentalized. Departmentalization is itself the creature of a certain mind-set regarding how the world is to be perceived, and that perception creates winners and losers.

The curricular categories reinforcing departmentalization are rarely questioned, though departmentalization as an organizational form has been questioned consistently as appropriate or desirable over time (Kliebard, 1986, p. 269).

The secondary curriculum is centered in departmentalization, and most "reforms" of it have ended in failure, not because learners find it difficult, but because the bureaucracy of the state, university, state departments of education and licensing, accreditation associations, developers of national tests, and teacher unions find it counter to their interests and political positions. A stratified society requires stratified schools with stratified curricula. Departmentalization supports that agenda splendidly. Magnet high schools soundly challenge the efficacy of the departmentalized comprehensive high school. Yet the comprehensive high school still dominates the American secondary school landscape.

Refusing to Engage in Tinkering

It should be clear to the reader by now that creating a TQE learning place is definitely not tinkering with the status quo. It is far more radical in both what it prohibits and what it advocates. In many ways TQE learning places, at least intellectually, have many precedents in the theoretical landscape of American public education, notably to John Dewey and his turn-of-the-century ideas regarding cooperative schooling to improve the social order. That they never really took root is partly a matter of the complexity of the task itself and partly a matter of not finding a common agenda for the public at large to support (see Cremin, 1961).

Opposition and Opponents

The downfall of most attempts to reform the "subject" curriculum in American schools has been the result of:

- The resistance of scholars and academicians in the traditional subject content fields aided by large government grants
- The reaction of conservatives to embrace a curriculum that threatens the socioeconomic status quo and challenges the social privilege and status of largely white, upper-middle-class parents
- The politics of mandating curriculum change, which has been dominated by behaviorists and psychometricians made powerful by the thrust of the accountability and so-called "excellence" movements in education, which translates into grander educational "inspection"
- Parents of the religious right who oppose curricular change that includes critical thinking

Educators interested in TQE learning places will find that Deming's rejection of competition and call for cooperation in the schools will be resisted by those who like the system as it is. These will be the people who profit most from the system—parents of the gifted, teacher unions, politicians who feed on public education for contracts and patronage, central office administrators, state departments of education, and colleges of education whose existence depends on certifying teachers and administrators to fit into the status quo.

Traditional academics have a long history of antagonism toward multi- or interdisciplinary work in school curricula, beginning with the attacks in Arthur Bestor's 1953 classic *Educational Wastelands*, in which he stressed that the school's role was to teach students to think, to be "intellectually trained," and that that was accomplished by study in the traditional academic disciplines (Cremin, 1961, p. 345). One finds the same kinds of resonances in the arguments of Hirsch (1988) and his concept of *cultural literacy* on the curriculum scene 40 years later.

Contemporary research on thinking and conceptual growth does emphasize problem solving as essentially multidisciplinary in scope. Research regarding student learning styles also is reinforcing the idea that thinking cannot be confined to any one area of the curriculum (Keefe, 1987). Robert Peterkin, a former school superintendent in Milwaukee and now head of the urban superintendent's program at Harvard Graduate School of Education, complained that American schools were "continuing to do the drill-and-kill exercises" around basic information and not preparing students, especially minority students, to "be agile-minded, problem-solving workers" (Greenhouse, 1992, p. F14).

Parents most likely to be opposed to eliminating competition from the schools are those whose students do the best in school. The hostility of parents of gifted students to the detracking of schools is well known among field administrators. Some parents want schools to maintain competition because they see the world as essentially competitive and want their children adequately prepared. Yet Deming's lesson for business and industry is just the opposite. Businesses and organizations that emphasize cooperation are most likely to succeed. Cultural differences abound, too. Where the Japanese are likely to insist on cooperation, Americans may call such practices "monopolistic" and exclusionary. Deming is fond of repeating in his lectures that the Japanese will not immediately change their relationships with business associates on a whim. Such relationships have been long established over time. Americans see this "clubiness" as overly protectionistic. Americans do not appreciate the values of cooperation between a business and its major suppliers. The world is becoming a smaller and smaller place. One of the major causes for firing workers in the contemporary workplace is that they cannot get along with other people, an indication that the interactive cooperative social skills necessary in a complex and interconnected work force are not being learned in America's schools.

The accountability movement, to a large extent, has been fueled by the test score debates and concern about more exams and tests in education. This is a manifestation of the American penchant for "inspecting" quality in, rather than building it in. Exactly how will more tests improve learning and teaching, especially when the

purpose of the tests is to reward and punish? The same can be asked about standards or, as Deming (1993) calls them, "specifications." Deming notes that "specification limits are not action limits" (p. 182) because there is apt to be no logical connection between what one does and reaching or not reaching the specification limits.

Standards that exist without any connections to what real actions exist in the organization cannot be used to control or direct them. No amount of adjustments in the organization are possible to do better in the absence of such connections.

Finally parents and politicians of the religious right have raised havoc with any curriculum that attempts to deal overtly with values. States such as Pennsylvania and Kansas, which have tried to adopt curricular outcomes that include values, run afoul of the religious right and its fanatic resistance to exposing students to values that run contrary to their own. This particular strain of cultural chauvinism excludes multicultural curricula or any content that would expose students to other religions or other viewpoints about such controversial problems as AIDS, sexual relations, abortion, and forms of contraception. The religious right defines itself as the protector of God's curriculum, and all others are the instruments of Satan (see Delfattore, 1992).

Clearly a problem-centered curriculum that allowed students to select one of these controversial areas as possibilities for study would encounter fierce resistance by the religious right. Groups that favor censorship in the schools because books may contain ghosts or goblins and alleged devil worship (Gilmore, 1991) will not take kindly to a problem-centered, multidisciplinary curriculum based on critical thinking (Kropp, 1993).

So educators should be mindful of the kinds of opponents "out there" when they decide to move in full force toward a Deming TQE learning place.

Learning-Centered Education

It will be difficult for many readers to envision exactly what the TQE curriculum is. They are likely to understand what it is not

before they have a grasp of its essential nature. Part of the problem is past professional training and conditioning.

Most educators have been trained to begin by listing objectives as outcomes and designing a system, a school, or a classroom to "meet" them. This is the logico-deductive approach, which is deeply embedded in much contemporary administrative practice and educational research. The problem with this approach is it makes students' "means" into somebody else's "ends." The TQE curriculum must eliminate competition and substitute cooperation. It must preserve the natural joy of learning that all humans possess. To do so means fundamentally shifting the locus of thinking from the ends of the system or the ends of what students are to know, to the students themselves. It means radically changing the center of gravity of educational institutions.

Models of planning, curriculum, and administrative and teacher training have all been built on the learner as the recipient of education. As such, learning is passive and teaching is active. To reverse this fundamental relationship means decentering all of the reinforcing ideas and practices that continue to support the old dyad. The TQE learning place therefore decenters most practices while it is recentering a new learner-teacher relationship.

Even as it is recentering a new relationship, there will be a strong tendency by educators, parents, and citizens to believe, simplistically, that the learners can do anything they want. Such is not the case. If we consider the home as the first learner-centered place, young children cannot do things that may be injurious to themselves. Children are not allowed to "run wild," unless they are growing up in an extremely permissive or nonexistent home. There are rules about dress, food and feeding, behavior, language, voice, customs, and protocols that must be learned. Yet in all of these "first lessons," the curriculum of the home is child-centered. Unless physically or mentally disabled, all children learn a language, how to walk, how to dress, habits of toilet and cleanliness, and culturally acceptable social behavior with other children and adults. Many learn how to play an instrument, dance, and engage in various forms of play by listening and watching and attending to a variety of visual stimuli.

When the school becomes an extension of the home, the same rules pertain. Children cannot do anything they want. Child-

centeredness has its own form of discipline. The TQE learning place is not a site where "anything goes." Its focus, structure, and method are simply different from what the traditional teacher-centered institution has embodied. Just as no parent wants his or her children to become "losers," the TQE learning place shuns any of its students becoming "losers." The bonding idea of the TQE learning place centered on cooperation is that of the family, which provides cohesion as well as the development of differences simultaneously focused around the child. The central idea is to preserve the joy of learning by maintaining the integrity of the learner to initiate much of his or her own learning. Self-initiated learning is rarely boring. School is often boring.

Moving Toward a TQE Curriculum

Educators may be wondering whether it is possible to adopt some ideas of the TQE concept without engaging in a full-blown revolution. One should not tinker with TQE, although almost every new idea in education has been tinkered with in some way, shape, or form over time. TQE is more than simply higher standards, more meticulous teaching, and better tests. To do all of those things would be to miss out on what TQE is really all about. TQE is about children and learning first. Everything else is second.

There is a real danger that TQE simply will be translated as better education that is cheaper. This is the efficiency mind-set that has subverted educational management since the days of Frederick Taylor (see Callahan, 1963).

In an effort to be helpful, we have constructed Table 4.2, which presents some of the initial steps that administrators, teachers, and parents may take to move toward a Deming TQE learning place. Table 4.2 indicates the successive "layers" of change that must be considered when moving to a TQE school.

Always "Becoming"

Moving toward a Deming TQE learning place is a process of always "becoming." One never arrives, because ways to improve

(Continued on page 89)

TABLE 4.2. A Partial Checklist of Activities That Will Move Our School Toward a Deming TQE Learning Place

Activity	*Status Report*		
	Anticipate	*Underway*	*Completed*
Staff Development			
1. Read and understood the Deming TQE philosophy of cooperative education.	_____	_____	_____
2. Attained a consensus of faculty and parents to initiate plans to change to a TQE school.	_____	_____	_____
The Planning Stage			
3. Have identified the key areas to be changed at our school first, second, third, etc.	_____	_____	_____
4. Have created an action plan to engage in change that identifies specific steps, the responsible parties, and a timetable for when those steps will occur.	_____	_____	_____
5. Have developed a budget that accompanies the plan and every step in it.	_____	_____	_____
6. Have prepared a list of agencies to contact to seek exceptions or waivers to current law, regulations, or policies that stand in the way of moving to a Deming TQE school.	_____	_____	_____

TABLE 4.2. Continued

Activity	*Status Report* *Anticipate*	*Underway*	*Completed*
Initial Action Steps			
7. Identify initial changes to take effect:	_____	_____	_____
7.1. Elimination of letter grades	_____	_____	_____
7.2. Elimination of all forms of competition	_____	_____	_____
7.3. Elimination of tracking/ability grouping	_____	_____	_____
7.4. Elimination of standardized testing	_____	_____	_____
7.5. Elimination of standards or goals that do not direct essential activities	_____	_____	_____
Intermediate Transitional Steps			
8. Eliminate grade levels and move toward nongradedness.	_____	_____	_____
9. Develop first list of curriculum "chunks"; create and pilot them.	_____	_____	_____
10. Move toward flexible scheduling models.	_____	_____	_____
11. Initiate forms of major learner choices in the curriculum.	_____	_____	_____
12. Initiate necessary changes in school facilities to support a learner-centered educational program.	_____	_____	_____

(Continued)

TABLE 4.2. Continued

Activity	*Status Report*		
	Anticipate	*Underway*	*Completed*
13. Develop preliminary forms of continuous diagnostic assessment instruments and field test them.	_____	_____	_____
14. Engage in extended staff development to reconceptualize the nature of teaching and classroom work.	_____	_____	_____
Culminating Steps			
15. Move into full-blown interdisciplinary curriculum; abolish "subject" curriculum.	_____	_____	_____
16. Abolish departmentalization.	_____	_____	_____
17. Implement full-scale, continuous diagnostic assessment program.	_____	_____	_____
18. Implement student-controlled scheduling, abolish master schedule.	_____	_____	_____
19. Implement change in instruction to full-blown learner choices within clear curriculum chunks.	_____	_____	_____
20. Continually evaluate, revise, and improve any aspect of the TQE school to work better.	_____	_____	_____

the school are becoming apparent after entering each successive stage. This is the idea of *kaizen*, or continuous improvement, another reason why static objectives are to be avoided in curriculum planning in Deming learning places (see Heckman, 1993; Imai, 1986). Nothing is static or final in a TQE learning place. In moving away from a traditional school to a Deming learning place, the arrival point is postponed indefinitely because it is always becoming better.

Key Terms and Concepts

Active learner. A learner or student who is able, by virtue of the educational system design, to engage in major decisions within a curriculum chunk about what, when, how, and under what conditions his or her learning will take place.

Arena planning. An approach to planning that rejects the idea that the future will be stable and that specific objectives can be derived as finite places by which to construct a curriculum. It rejects the usual means-ends relationships whereby curriculum is "developed" to include or lead to specific outcomes or objectives.

Classroom. A specific place with embedded routines that take on a physical space and sets of activities in which the teacher is the dominant force and learners are passive lumps of clay to be "molded" according to preestablished objectives.

Continuous diagnostic appraisal. An approach to student evaluation centered on the idea that the purpose of testing is to improve learning and not to classify, categorize, or stigmatize the learners on some artificial curve of scarcity. *Diagnostic* means that the testing program is aligned with the curriculum and will reveal specific deficits in the curriculum chunk in which learning has taken place. *Continuous* means that such assessment occurs all the time and can be informal, as well as formal in design.

"Covering" curriculum metaphor. A descriptive idea that curriculum is a road and the student who travels that path must make a specified amount of progress each day, semester, or year. The

metaphor is reductionistic and makes the learner a passive traveler whose only choices are speed (fast or slow), congruence to the road (on or off task), and style (dominant mode of learning on the road).

Curriculum chunking. A concept that identifies curriculum as a large swath of territory, almost always multidisciplinary, and that includes many values, objectives, goals, methods, and activities within which student selection may occur. A nonbehavioral approach toward conceptualizing curriculum development.

Curriculum core. An idea that rests on the notion that some definitive body of knowledge exists that is good for everybody and for all time. Any curriculum core imposes a synchrony (pattern) that is present only in the developer of the approach that leads to the creation of the core. In reality there is no core.

Departmentalization. The organization of a school around curricular subjects such as math, science, social studies, English, and the like.

Drill-and-kill teaching. The reduction of teaching to lists of skills to be learned or mastered out of context, usually for the sake of doing well on certain kinds of tests. Leads to boredom and learning that cannot be applied in any context but a narrowly tested one.

Expressive objectives. An idea of Eliot Eisner that objectives can be expressed as activities or processes in which specific outcomes are not appropriate.

Kaizen. The idea that there is no finality to becoming "better" and that a TQE school will always be becoming better. Therefore it never "arrives." It invalidates the idea that change is a one-shot affair and involves moving from the current state to some known and final desired state.

Means-ends dichotomy. The notion that some things, such as curriculum or teaching, are means to desired ends, such as learning. This traditional dichotomy reduces the learner to a passive status in an institution in which teaching, rather than learning, is primary.

Nongradedness. The abandonment of the grades or grouping norm by the chronological age of the students in a school.

Open-block scheduling. The elimination of a 5- or 6-period day and the creation of a schedule that contains large blocks of time that are unscheduled on a school's master schedule.

Power/knowledge relationship. The idea that knowledge is always embedded in a context of relationships that are hierarchical in nature. Knowledge is not discovered; rather, it is produced, and it benefits some but not others. Knowledge, therefore, is never a neutral commodity. It is relational.

Problem-centered curriculum. A curriculum structured around themes, situations, or dilemmas that are posed as quandaries for learners. Such a curriculum may include elements of chronology, but the curriculum is not organized in a chronological manner.

Reductionism. An approach toward understanding reality that begins by delimiting and simplifying the field of perception to only a few select variables or categories.

Static curriculum models. A model of curriculum that insists on developing goals and objectives good for all time and that remains constant in designing curricula. Such models falsely assume that society is unchanging. Only dead or frozen societies would find such models useful. Examples of a "frozen" society are the Amish and the Hasidic Jewish communities.

References

Adler, M. (1982). *The Paideia proposal.* New York: Macmillan.

America's blacks. (1991, April). *The Economist,* pp. 17-21.

Bestor, A. (1953). *Educational wastelands.* Urbana: University of Illinois Press.

Callahan, R. E. (1963). *Educational and the cult of efficiency.* Chicago: University of Chicago Press.

Cremin, L. A. (1961). *The transformation of the school.* New York: Random House.

Darder, A. (1991). *Culture and power in the classroom.* New York: Bergin & Garvey.

De Bono, E. (1980). *PO: Beyond yes and no.* New York: Penguin.

Delfattore, J. (1992). *What Johnny shouldn't read.* New Haven, CT: Yale University Press.

Deming, E. W. (1993). *The new economics.* Cambridge: MIT Press.

Dewey, J. (1962). *The child and the curriculum.* Chicago: University of Chicago Press. (Original work published 1902)

Eisner, E. (1969). Instructional and expressive objectives: Their formulation and use in curriculum. In R. E. Stake (Ed.) *Instructional objectives* (pp. 1-31). Chicago: Rand McNally.

Eldersveld, S. J. (1989). *Political elites in modern societies.* Ann Arbor: University of Michigan Press.

English, F. W. (1992). *Educational administration: The human science.* New York: Harper Collins.

English, F. W., & Hill, J. C. (1990). *Restructuring: The principal and curriculum change.* Reston, VA: NASSP.

Gilmore, S. (1991, May 15). Rutherford Institute called an ACLU for religious right. *Seattle Times,* p. B3.

Glatthorn, A. (1986). How does the school schedule affect the curriculum? In H. J. Walberg & J. Keefe (Eds.), *Rethinking reform: The principal's dilemma* (pp. 53-60). Reston, VA: NASSP.

Gordon, C. (1980). *Power/knowledge.* New York: Pantheon.

Greene, M. (1971). The teacher and the Negro child: "Invisibility" in the school. In G. Henderson (Ed.), *America's other children* (pp. 145-151). Norman: University of Oklahoma Press.

Greenhouse, S. (1992, June 7). A lack of problem solvers. *New York Times,* p. F14.

Haggerson, N. L. (1993, January). Education for human rights: Demythologizing dysfunctional qualities of myths. *International Journal of Educational Reform, 2*(1), 49-55.

Hall, E. T. (1966). *The silent language.* New York: Fawcett.

Hall, R. H. (1969). *Occupations and the social structure.* Englewood Cliffs, NJ: Prentice-Hall.

Heckman, P. E. (1993, July). School restructuring in practice: Reckoning with the culture of school. *International Journal of Educational Reform, 2*(3), 263-272.

Heise, M. (1993, June 23). Getting an "A" should get kids a job. *Wall Street Journal*, p. A14.

Highwater, J. (1990). *Myth and sexuality.* New York: New American Library.

Hill, J. C. (1993, April). The child-centered school. *International Journal of Educational Reform, 2*(2), 126-139.

Hirsch, E. D., Jr. (1988). *Cultural literacy.* New York: Random House.

Imai, M. (1986). *Kaizen.* New York: McGraw-Hill.

Jenkins, J. M. (1993, April). A high school for all reasons. *International Journal of Educational Reform, 2*(2), 185-192.

Katz, M. B. (1973). *Class, bureaucracy, and schools.* New York: Praeger.

Keefe, J. W. (1987). *Learning style: Theory and practice.* Reston, VA: NASSP.

Kliebard, H. M. (1986). *The struggle for the American curriculum 1893-1958.* Boston: Routledge & Kegan Paul.

Kropp, A. J. (1993, April 29). The religious right's stealth campaign. *Wall Street Journal*, p. A15.

Lincoln, Y. A., & Guba, E. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

McLaren, P. (1986). *Schooling as a ritual performance.* Boston: Routledge & Kegan Paul.

Milroy, J., & Milroy, L. (1991). *Authority in language.* London: Routledge.

Page, R. (1991). *Lower track classrooms: A curricular and cultural perspective.* New York: Teachers College Press.

Toch, T. (1991). *In the name of excellence.* New York: Oxford University Press.

Wenninger, E. P. (1975). Entropy, equilibrium, and organizations: Problems of conceptualization. In A. J. Melcher (Ed.), *General systems and theory: Methodological aspects* (pp. 23-32). Kent, OH: Kent State University Press.

✧ 5 ✧

Evaluation

Evaluation has come to have a place of sanctity in American education. The American penchant for *inspection* as the solution to most problems reveals itself fully. Americans love to rate and rank things. Competition and comparison in everything from sports to beer to automobile sales dominate American life. The media particularly play to this hunger for comparison. Americans appear to have a deep-seated desire to be "number one" in about everything that matters, leading ex-President George Bush to proclaim that the United States would be number one in math and science by the year 2000.

Deming has spoken against competition as divisive and counterproductive to business and education. Deming (1993, p. 57) has stressed the value of cooperation over competition. He believes that competition, especially within systems, leads to the detrimental outcome of *suboptimization*.

Evaluation in the TQE learning place will be predicated on these principles:

- It will not corrupt the goals of cooperative learning.
- It will not "lead" the curriculum or the learning program.
- It will not use norms that require failure to define success.
- It will not "drive" the educational system.

In short, the evaluation approach for the TQE learning place will reject the false science of education around which much of the

accountability legislation and judicial decisions have centered (Wise, 1979).

Learning Versus Measurement

Those who ascribe to the "science of education" claim that it is possible to relate means to ends—that is, learning outcomes to inputs or processes within schools. Such a science would permit educators to engage in elaborate cost-benefit analyses so that it would be possible to indicate what teaching techniques produce what results. Such a "science" of education is not a reality, despite the assertions of many reformers, the wishes of legislators, and the laws they pass (Jim Guthrie, as quoted in Wise, 1979, p. 75) that they believe will establish such a science in the name of accountability.

Wise (1979) coined the term *hyperrationalization* to indicate how court proceedings and legislation aimed at mandating learning all assume that a *science of education* is reality. Such a reality is far from being possible. The major problem of evaluation in educational systems today is that it has become obtrusive. Instead of learning being the centerpiece of education, measurement has usurped the role of learning. The widespread use of behavioral objectives has helped in this process of substituting what is measurable for what one might learn (see English, 1987, p. 193).

Kvale (1983) called the proclivity for measurement and so-called "hard data" a kind of political arithmetic in educational research. In this equation "method" supersedes content, and "quantification per se counts more than what is quantified" (p. 444). Bureaucracies and politicians are partial to statistics because the numbers present a picture of decision cleanliness and simplicity. The idea that inspection, now called *accountability*, in education will solve most of education's problems has become a fact few want to challenge. But the TQE learning place evaluation model does and will challenge this myth.

The TQE learning place does not establish skills per se as the purpose of education. Nor are skills by themselves the most important part of education. Therefore tests that place skills as the preeminent be-all and end-all of teaching are rejected as inappropriate for a place centered on learning. This proposition rejects nearly all

standardized achievement tests as inappropriate, and most criterion-referenced tests as well. It does not matter whether the test is norm referenced or criterion referenced if the purpose is to force a common curriculum dominated by skills or facts to be taught in isolation. Tests are powerful shapers of curriculum and contain implicit assumptions about learning that may be contrary to the learning process that centers TQE learning places (see Cooley, 1993; Shepard, 1991).

Keeping the Joy in Learning

Achievement tests contain implicit assumptions about learning. Most such tests assume that basic skills can be taught before children engage in higher order thinking and that, therefore, basic skills can be taught in isolation. Recent research (Resnick & Resnick, in press) in cognitive psychology shows that "thinking and reasoning are intimately involved in successfully learning even elementary levels of reading, mathematics and other school subjects." "The sequential, facts-before-thinking model of learning is contradicted by a substantial body of evidence from cognitive psychology" (Shepard, 1991, p. 9).

The main goal of evaluation or assessment is to determine not only whether learning is occurring but also whether the joy of learning is still present. This goal means that the context of assessment is critical because it cannot be allowed to destroy a delicate and implicit aspect of the learning act in humans. In this sense, much testing is destructive. It is obtrusive and it negatively alters the psychological state it seeks to assess. Testing creates a kind of pollution of learning.

TQE learning places will not use forms of testing and assessment that destroy the joy of learning. They will not use instruments that, in effect, become the curriculum by usurping the role of the learner in making meaning for himself or herself. Tests will not decenter learning by forcing it to the margins of both school activities and curriculum construction.

Tests that are administered in highly competitive situations and that report scores publicly embody the kind of competitive

beliefs that erode cooperative forms of learning and set up some students to fail. Norm-referenced tests are notoriously evil in this respect.

Putting Learning First

The TQE learning place will not position evaluation first and learning second. It will not use behavioral objectives based on the belief that all learning can be "specified and measured both completely and exhaustively" (Shepard, 1991, p. 7). It will avoid the belief that learning is essentially linear. Instead the learning model of the TQE learning place will embrace an organic, multiphasic view of the process. Knowledge acquisition is believed to follow semantic networks, not logic. The "philosophy" of the TQE learning place, therefore, will:

- View objects as relative to the learner's interactions with them, not as a separate reality apart from those interactions
- See properties likewise as interactive, not fixed
- View categories as experiential gestalts, not rigid sets outside of human experience (Lakoff & Johnson, 1980, p. 210)

Human mental learning is viewed as metaphorical in origin. It is intimately a part of the cultural context in which the human infant is reared. Lakoff and Johnson (1980) call metaphor *imaginative reality*: "Metaphor is one of our most important tools for trying to comprehend partially what cannot be comprehended totally: our feelings, aesthetic experiences, moral practices, and spiritual awareness" (p. 193). TQE learning places will be multicultural by design. Not only are metaphorical thought processes embedded in culture, but there also is no fixed identity to being "American" (Kessler-Harris, 1992, p. B3). The fluidity of the learning place is predicated on the lack of fixed truisms in the real world. The ontology of the learning place is antiauthoritarian in this respect. Because standardized tests are based on assumed fixed properties of truth and contain an assumption that these fixed properties can be compared from one individual to another, they are rejected at

the outset as inappropriate tools that are contrary to the operational philosophy of the TQE learning place.

Defining Success

The so-called "normal curve" makes it appear "natural" that some children must fail. When any distribution of score frequencies is disbursed along a continuum that assumes the bell-shaped line so familiar to students of educational psychology, half of the students must be below average *by definition*. Ralph Tyler (1974) argued that this frequency distribution is not correct when assessing achievement. What is desired is a "J curve," the kind of frequency distribution in which all children learn successfully. Benjamin Bloom (1981) noted, "There is nothing sacred about the normal curve. It is the distribution most appropriate to chance and random activity. . . . If we are effective in our instruction, the distribution of achievement should be very different from the normal curve" (p. 155).

TQE learning places reject any assumption of measurement that requires failure to define success. There can only be "above average" students when "below average" students exist. And an average is never a student; it is always a statistic. Each of the children in a TQE learning place is special. They all learn differently. Sometimes pace is important, but all children can and do learn successfully.

Putting Evaluation in Its Place

TQE learning places reject the ideology of "results" driven or management by objectives that Deming (1993) also so forcefully eschews. "Certainly we need good results," says Deming, "but management by results is not the way to get good results. It is action on outcome, not on the causes of results, i.e., on the system" (p. 34).

For this reason, TQE learning places will not use outcome data to "drive" the system. This is the fallacy of the "outcome-based" education movement. It does not pay attention to causes within

the system, but is captured by the idiosyncracies of the system. It therefore can never be significantly improved, particularly if the trouble with the system's functioning is internal to it and embedded in its outcome data.

The TQE learning place is driven by learning, not by results or measurement of learning. Learning is the centerpiece, not resulting from or ancillary to evaluation. The TQE learning place establishes the joy of learning first, its activities and processes second, content third, teaching fourth, and evaluation last. Evaluation as the embodiment of inspection is junked. Testing in the name of accountability has warped school activities. It has transformed testing into a competitive media event and has given the public a false view of the nature of education. Furthermore, it has perpetuated the doctrine of inspection as the antidote to the lack of educational quality in the schools even though testing can never establish quality at all.

Toward a New Rationale for Evaluation

The TQE learning place faculty and administration will make a prodigious effort to educate parents about the nature of evaluation. They will explain the flaws of standardized tests, including the tests' susceptibility to wealth indicators as the single biggest correlate to any achievement score when curriculum is treated as a random variable to the test selected to assess it (see Carroll, 1971, p. 35; Jencks, 1972, p 53). The TQE learning place will show parents how assumptions of linearity dominate much of the criterion-referenced testing movement as well and are not considered to be as reflective of how children learn to think. The usual cry "I want to know how well my child is doing compared with other children" will be shown to be artificially competitive and based on assumptions of static knowledge and a fixed reality that are supported only by political, rather than educational, standardization (see Milroy & Milroy, 1991).

A new kind of evaluation system will be required in the TQE learning place. That system will not be inspection oriented, competitive based, or intended to "drive" the operations of the enterprise.

To characterize the difference between the traditional evaluation program of the school and that of the TQE learning place, Table 5.1 has been provided.

Traditional school evaluation is centered on the need for control and prediction. The school sees itself as the reproductive agent of society and looks to society to establish the objectives for schooling. In this model the school seeks to replicate the existing social structure.

Behavioral objectives reduce complex learning to lower level skills and wrench instruction into contextless situations in which skills are taught qua skills. The "results" of this type of program are assessed with commercially prepared standardized tests or state-produced criterion-referenced tests. If test scores are not considered to be adequate, external intervention in the form of extra reports, "help" from the state department, or punitive actions that financially or politically stigmatize the school or school district are proposed.

All of the tests in the traditional school embrace competition and report scores by individuals, teachers, classes, schools, and districts in such a way as to invite comparison and competition. Analyses of these data are largely statistical and result in a system of forced rankings either by category or individually on a continuous scale.

Evaluation in a TQE learning place rejects control as the central raison d'être of education. Instead it substitutes personal development and personal meaning-making as the most sought after activities (see Hill, 1986, p. 157). The TQE learning place rejects competition and comparison in all forms. The learner is considered to be the most important partner in the enterprise, and a dialogue with the learner is the most appropriate avenue by which to teach or to evaluate progress.

Evaluation in the TQE learning place uses highly personal tools and techniques, such as biographies, sketch books, diaries, portfolios, and exhibitions of the actual work accomplished by the learner. Traditional concerns with reliability are not accurate because the term itself automatically is appropriated by a statistical response. Many so-called achievement or criterion-referenced tests lacked anything but content validity in the past (Shepard, 1991, p.

TABLE 5.1. A Comparison of Traditional School Evaluation and That of the TQE Learning Place

Dimensions	*The Traditional School*	*The TQE Learning Place*
Centered on	Control	Personal development
Control point	Societal needs	Purpose of learner
	Specified objectives	
Driven by	Outcomes/results	Meaning making
Strategy	External intervention	Internalization
Form	Particularistic	Dialogic
Evaluation modes	Proficiency tests	Biography
	Achievement tests	Sketch books
	Behavior/performance	Inquiry groups
	Teacher tests	Community service
	Letter grades	Hands-on work
	Curriculum-based tests	Exhibitions
	Basic skills tests	Apprenticeships
	Lab tests	Quest experiences
	I.E.P.s	Portfolios
	Job-rating performance	Collaborative planning
Evaluation forms	Statistics	Presentations
	Letter symbols	Creative expressions
	Comparative graphs	Qualitative feedback

7). The proposed evaluation tools, now termed *nontraditional assessment*, are just beginning to be applied on a large scale, notably in Kentucky (Steffy, 1993, pp. 50-70). These forms of assessment will be the most profitable to pursue in the TQE learning place.

Nearly all of the standardized measures of learning also carry an implicit idea of *efficiency*, the legacy of Frederick Taylor's "scientific management" (see Banta, 1993). Such tests are used today to judge whether schools or school systems are working as economically as possible. Furthermore, the tests force one to focus on the school as the most appropriate system, instead of on the learner as the system. The emphasis on evaluation in the TQE learning place will be on forms of qualitative measurement epitomized

in portfolio construction and other aspects of students exhibiting their own work. Other emphasis will be placed on group participation for determining how well students work with one another in collaborative planning, inquiry, or quest experiences.

Kaizen/Continuous Improvement

Kaizen is a Japanese word that means "continuous improvement." According to Imai (1986) it means an improvement in one's personal and social life, as well as working life (p. xx). However, an explanation of *kaizen* in practice shows that it is centered on the elimination of waste and efficiency, a throwback to the scientific management of Frederick Taylor.

Kaizen is not one of Deming's goals and is not indexed in his books *Out of the Crisis* (1986) and *The New Economics* (1993). *Kaizen* is a Japanese derivative. Imai (1986) devotes a small portion of his book to "kaizen men" (p. 96). These are veteran blue-collar workers who are released for 6 months or so to roam around Japanese factories, looking for better ways to do things. They use the QC (quality circle) as a process to engage the workers in discussions about improving efficiency. In turn the quality circle depends on a database gathered about production.

If the idea of *kaizen* is going to be applied in a TQE learning place, it will have to shed its trappings of efficiency. Human learning is as much fanciful as anything else. It is hardly efficient as an industrial engineer would design it. Imagine an industrial engineer diagramming an infant learning how to walk or talk. Engineering such processes probably would be more efficient but would remove all of the joy of learning as well.

If continuous improvement is going to be applied in a TQE learning place, it will have to refer not to indices of becoming better meaning less expensive, but to becoming better as a greater measure of personal meaning making of each learner in the learning place. Instead of continuous improvement, the TQE learning place will most likely be changed to continuous learning in a joyful fashion. That change assumes a very different image from the one affiliated with a factory model of *kaizen*.

Evaluation as Empowerment

The TQE learning place will embody a set of value characteristics different from those traditionally found for schools. Evaluation is primarily for informing the learner first—and his or her advisors and parents second—of progress, growth, interests, and abilities affiliated with learning.

Children will not be rewarded in any other way than to continue to pursue learning for the innate joy of it and to become more proficient in thinking, writing, speaking, playing, drawing, caring, and understanding as young human beings. Children will learn not to be ashamed or to fear evaluation because it is helpful not hurtful. Evaluation is necessary to become better, not to be compared with others. Evaluation is empowering, not destructive. When there are no losers, everyone can profit from evaluation.

To rid educational places of competition and imposed standards that create socially contrived and artificial winners and losers will require a complete reanalysis of why, by whom, and how evaluation occurs at all in TQE learning places.

It will be no easy task to come to terms with the tragic way evaluation has corrupted schools and the learning process that was supposed to take place in them. Standardized tests have reduced teaching to the lowest rote terms possible and have eroded the base of "excellence" being established in reformed schools (see Toch, 1991, p. 221). Excellence can never be established by testing it into education.

The public and the politicians they elect continue to believe that more testing will improve education. They fail to note that testing comes after, not before, instruction if it is to be any kind of barometer of what is going on in the schools. Testing, therefore, can never be a substitute for quality instruction. And they forget that the test contents themselves are imposed on classrooms and can and have become both the means and the ends of schooling. Tests have come to be symbolic surrogates for quality. Although they might be representative of a quality process, they can never be quality itself. That is Deming's great lesson in business. It has yet to be learned in education.

We believe that not a dollar more should be spent on testing. We do believe that many more dollars should be spent on transforming schools into more humane places that reject factory models as the appropriate metaphor for education and evaluation. We believe that education is a joyous activity. Every child has experienced some of it on the way through school. That school drums the joy out of education is a well-accepted truism by the third grade. After that, most children have come to understand that there is little joy, much fear, and a lot of boredom in schools.

We agree with school critic Lewis Perelman (1992), who said, "Reform is a hoax. The 'new, improved' education it is trying to sell us as an economic savior is really a solid gold life jacket: It glitters for attention. It's outrageously expensive. And the longer we cling to it, the deeper it will sink us" (p. 24).

The first step to improving schools is to abandon the existing idea of school itself. It cannot be saved. It is a relic to be put into an educational museum somewhere. The 21st century will require learning people who continue to learn. Any school system that fails half of its population should be junked along with the psychometricians who insist that such an idea is "normal." Although all children are not the same, all can be winners in an educational system designed for success. And success will never be an average to be defined by failure. The nation that achieves an educational system wherein everybody succeeds not only will rule the world but also will transform it. Such a system will be more powerful than the combined armies and navies of any major military power. Learning is the best-kept secret for any nation's continued economic growth and development. Japan rules the world's economic markets because that nation understands more clearly than others (including our own) that its children are its only and best natural asset. "Japanese children are national treasures to be loved and cherished" (Janesick, 1993). That is a lesson that America must learn again or else see its influence, idealism, and power continue to decline. We believe that the diversity of America's children contains a lesson for the world. Are we wise enough to understand it? Are we smart enough to invest in it? Are we clever enough to transform our schools from wastelands to fertile pastures? The purpose of this book has

been to try to influence an affirmative response at this historical crossroads on the cusp of the next century.

Key Terms and Concepts

Cooperative learning. Learning acquired with other learners and dependent on whose participation in the process.

Evaluation. A systematic activity to determine whether what was supposed to occur did, and whether data developed to engage in judgments regarding performance are useful, valid, and reliable.

Evaluation as inspection. The purpose of engaging in evaluation is to "snoop" and to find out what is wrong and "fix it." It is always external and after the fact, instead of becoming part of the process to *become* better. Sometimes called accountability.

Facts-before-thinking model of education. The idea that facts or skills should or can be learned in isolation from cognitive growth or the development of higher order thinking capabilities. Current research negates this assumption.

Hyperrationalization. The act of stretching the rationality of education to equate means and ends (as in a false science of education) in laws and judicial decisions.

J curve. A peculiar distribution of scores that, when graphed, produces a skewed normal curve to the right of the center, resembling the letter J.

Kaizen. A Japanese idea that means "continuous improvement". As applied in industrial examples, a search for waste. Should not be applied to education from a purely efficiency focus.

Meaning-making. The primary purpose of education, to engage in the construction of meaning from daily activity that may be physical or mental.

Normal curve. An assumption regarding learning based on the belief that what was learned was a random occurrence and will

produce a continuous variable when graphed like height or weight.

Obtrusive evaluation. Evaluative activities that change what is being evaluated inadvertently in the process of evaluation. In other words, the activity produces "effects" by itself that were not part of the original activity or learning.

Outcome-based education. The idea that results or outcomes should be used to design and evaluate the effectiveness and efficiency of educational systems. Rejected by Deming as inappropriate for failing to separate common from special causes; therefore one is unable to know which "results" are special or normal.

Science of education. A belief that means and ends can be clearly envisioned and related in economic cost-benefit terms in the schooling process. Such a science does not yet exist.

References

Banta, M. (1993). *Taylored lives: Narrative productions in the age of Taylor, Veblen, and Ford.* Chicago: University of Chicago Press.

Bloom, B. (1981). *All our children learning.* New York: McGraw-Hill.

Carroll, J. B. (1971). Problems of measurement related to the concept of learning for mastery. In J. H. Block (Ed.), *Mastery learning* (pp. 29-46). New York: Holt, Rinehart & Winston.

Cooley, W. W. (1993, Summer). The difficulty of the educational task: Implications for comparing student achievement in states, school districts, and schools. *ERS Spectrum, 11*(3), 27-31.

Deming, E. W. (1986). *Out of the crisis.* Cambridge: MIT Press.

Deming, E. W. (1993). *The new economics.* Cambridge: MIT Press.

English, F. W. (1987). *Curriculum management.* Springfield, IL: Charles C Thomas.

Hill, J. C. (1986). *Curriculum evaluation for school improvement.* Springfield, IL: Charles C Thomas.

Imai, M. (1986). *Kaizen.* New York: McGraw-Hill.

Janesick, V. J. (1993, October). Of chrysanthemums and Confucius: Some impressions of recent Japanese educational reforms. *International Journal of Educational Reform, 2*(4), 354-359.

Jencks, C. (1972). *Inequality.* New York: Basic Books.

Kessler-Harris, A. (1992, October 21). Multiculturalism can strengthen, not undermine, a common culture. *Chronicle of Higher Education,* pp. B3, B7.

Kvale, S. (1983). The quantification of knowledge in education: On resistance toward qualitative evaluation and research. In B. Bain (Ed.), *The sociogenesis of language and human conduct* (pp. 433-448). New York: Plenum.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by.* Chicago: University of Chicago Press.

Milroy, J., & Milroy, L. (1991). *Authority in language.* London: Routledge.

Perelman, L. J. (1992). *School's out.* New York: William Morrow.

Resnick, L., & Resnick, D. (in press). Assessing the thinking curriculum: New tools for educational reform. In B. R. Gifford & M. C. O'Connor (Eds.), *Changing assessments: Alternative views of aptitude, achievement, and instruction.* Boston: Kluwer.

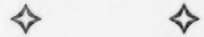
Shepard, L. A. (1991, October). Psychometricians' beliefs about learning. *Educational Researcher, 20*(7), 2-16.

Steffy, B. E. (1993). *The Kentucky education reform: Lessons for America.* Lancaster, PA: Technomic.

Toch, T. (1991). *In the name of excellence.* New York: Oxford University Press.

Tyler, R. (1974). The use of tests in measuring the effectiveness of educational programs, methods, and instructional materials. In R. W. Tyler & R. M. Wolf (Eds.), *Crucial issues in testing* (pp. 143-156). Berkeley, CA: McCutchan.

Wise, A. (1979). *Legislated learning.* Berkeley: University of California Press.



Planning and Troubleshooting Guide

Ability Grouping
As an educational practice 2

Accountability
Movement 95, 99

Administration
Common and special causes 5, 98-99 ,106
Competition 75, 96-97
Departmentalization 79-80, 90
Efficiency 101
General systems theory 61
Input/output mechanical modes 66, 71
Means-end continuum 74-76
Metanoia 8, 16
Overjustification 75
Pay incentives 6-7
Problem solving 82, 91
Pullouts 9
Syndrome of inspection 98-99
Visions 7-8, 26

Board of Education
Role of board policy 86

Change

Arena planning	65, 89
Chaos theory	28
Common versus special causes	7, 10
Continuous diagnostic appraisal	78, 89
Critical education	31
Detracking	82
Inability	30
Metamorphosis of schools	30
Organization development	33
Outside intervention	7, 33
Planning systems	62-63
Quality circles	11, 102
Reductionism	68, 90
Reflection in action	30
Reform	10
Restructuring	30, 75
Synergy	14
Systemic	7, 12
Tinkering	30, 80

Control

Behavioral objectives	31, 73, 95, 98
Capacity-catching machine	20
Censorship	29
Common school practices	9, 27, 31, 66, 75
Containment	10
Curriculum of domination	32, 66, 78
Custodial institution	10, 66
Hierarchical relationships	4, 60-61
Hyperrationalization	95, 105
Line balancing	9, 16
Outcome-based education	32, 52, 73, 98, 106
Political arithmetic	95
Power relationships	5, 62, 71, 91
Psychology of school	20, 27, 75
Science of education	29, 94, 106

Scientific management 85
Social order 9
Social stability 60-64
Teaching 14

Culture and Cultural Assumptions
Androcentrism 14, 29
Class privileges 31, 61
Clock metaphors 71
Communal bonds 15
Continuous reconstruction 60, 77
Correspondence theory 16, 61
Cultural freezing 14, 60
Cultural literacy 14, 60, 81
Culturally different people 6
Cultural metanarratives 26
Cultural mythology 29, 33
Diversity 13, 31, 104
Elite knowledge 14, 32, 60, 71
Hidden curriculum 3, 16
Middle-class children 74
Monoculturalism 6, 13, 16, 31
Moral malaise 30
Multiculturalism 14, 29, 83
Racism 10, 29, 61
Social Darwinism 9-10, 31, 60-61
Social immorality 40
Social living 4, 23
Social reproduction 5, 31, 61, 64
Social wealth and power 10, 31, 61
Socioeconomic level 10
Traditional school 6, 31, 75

Curriculum
Alignment 10
Biological origin 29, 37
Chunking 71-74, 90
Core 90

Hidden 16
Internal 66
Liberal education reforms 10
Multidisciplinary work 76
Planning 60-91
Problem-centered 82, 91
Relational 38
Scenarios 34
Value-free 62

Education

Arts 40
Child as meaning maker 34, 105
Child-centeredness 84-85
Children's natural development 37-45
Common school 13
Common school practices 75
Drill-and-kill exercises 82, 90
Efficiency 20
Excellence movement 81, 103
Experience 46
Grade inflation 4
Grading 1, 16, 79
Grading on the curve 75
Japan 76, 82, 104
Knowledge 12, 20, 32
Learning place 20-34
Levels of inquiry 43
National educational goals 7, 12, 65
Nongraded schools 14, 78
Novelty 45
Rankings of schools 2
Ranking of students 2, 6, 14, 75
Real learning 31, 53
Scientism 10, 62
Synchrony 69
Tracking of students 2, 9, 17, 63, 75
Unattainable goals 7

Governance/Politics

Arena planning	65, 89
Consultation versus supervision	25
Corruption of goals	32
Ethico-political expressions	61-62
Home-school-community-business linkages	25
Leading	24
Management by objectives	6, 98
Parental involvement	11-25
Power-knowledge	10, 60-62, 71
Religious right	81, 83
Site-based management	11
Syndrome of inspection	94, 105

Instruction

Action as teacher	48
Affective domain	46
Behavioral objectives	31, 74
Detracking	82
Emotions as teacher	46
Examination	48-50
Experience as teacher	47
Expressive objectives	70, 90
Higher order thinking skills	69-70
Home	22, 84
Inspection	12, 82, 105
Knowledge	10, 63
Lesson plans	77
Nongradedness	14, 91
Nonverbal questions	46
Open-block scheduling	78
Parental education	99
Peer teaching	78
Pullouts	9
Report cards	79
Situational teachers	51

Strands of continuity 64
Surfing a discussion 64
Teaching 14, 21
Teaching themes 45, 57
Team teaching 14
Testing as destructive 10, 33, 94-99
Traditional school 13, 65
Unknown as teacher 46, 50
Whole language 76

Learning/the Learner

Active learner 21, 23
Altruistic principle 30
Becoming 22
Book of learnings 26, 33
Classroom 27, 77, 89
Cognitive psychology 74
Competence 36, 42, 57
Conscious competence 42
Continuous learning 77
Cooperative learning 78, 82
Creative human 22, 41, 52, 55
Critical thinking 83
Destructive activities 9-10, 41
Destructive competition 2, 10, 74
Evaluation 94-105
Exploring, creating, becoming 22
Fact-before-thinking model 96, 105
Higher order thinking skills 69-70
Imaginative reality 56
Inquiry 36, 38, 43, 58
Intelligence 22, 29
Intelligent human 52, 56
Joy of learning 3, 8, 21, 28, 70, 73, 85, 96, 103
Learning as linear 20, 69
Learning experiences 70

Learning model 36
Learning style 27, 82
Logico-deductive approach 84
Moral development 41, 74
Normal curve 75
Peer collaboration 34
Portfolios 101
Productive human 52
Readiness 38-41, 47, 58
Rhythmicity of body functions 38
Search behavior 22
Self-actualization 39
Self-concept 39
Self-domain 38, 58
Self-readiness 36
Social and moral human 52, 54
Spiritual human 52-54
Spontaneity 40
Types of newborns 37
Unfinished human 52, 56
View of child 37-38, 61
Voice print 22

Quality

Common versus special causes 5, 10
Cooperation 2, 105
Deming and Dewey 1-8
Kaizen 89-90, 102, 105
Metanoia 8, 16
Overjustification 75
Phony scarcities 9-10
Suboptimization 2, 6, 11, 17
Theory 7

Testing

Artificial scarcity 4, 15, 75, 103
Inspection 17
J curve 32, 98, 105

Lake Wobegon effect	9, 16
Normal curve	9, 32-33, 75, 98, 104-105
Scientific tests	29, 96
Standardized tests	6, 9, 15, 75, 78, 96
Winners and losers	2, 8, 32, 61, 65, 71, 75

Total Quality Education

Transforming Schools Into Learning Places

Fenwick W. English
University of Kentucky, Lexington
John C. Hill
University of Cincinnati, OH

Schools that try to serve everyone are not places where everyone succeeds. In fact, large numbers of children fail rather regularly. To design a school where all children succeed means creating a place that puts *learning*, rather than competition, at the heart of the process.

Fen English and John Hill conclude there is no way to do this except to scrap our current school model — and its curriculum — and begin again. They suggest turning schools inside out: no more classrooms! The result will be *learning places* with teachers who know how to guide the process.

In ***Total Quality Education*** (TQE) the authors skillfully adapt the proven business principles of W. Edwards Deming and apply them to education.

English and Hill are not detached intellectuals dreaming the impossible dream. They offer experience based on four decades of practitioner experience. They detail how the educational changes that embody TQE are possible and applicable to everyday practice. English and Hill take pains to describe the nature of TQE and what learning places are like. Principles, characteristics, organization, schedule, staff, instruction, and supervision — each has its turn.

The authors acknowledge that there may be plenty of resistance to replacing competition with cooperation, but they note that, "It took American business nearly five decades to appreciate the ideas behind TQM. It will take American education at least as long. One starts by starting. The children are worth it!"

ISBN 0-8039-6106-5 (Paperback only)

BEST COPY AVAILABLE

CORWIN PRESS, INC.
A Sage Publications Company
2455 Teller Road
Thousand Oaks, CA 91320-2218
Call: 805-499-9774 Fax: 805-499-0871